

## MHC Class-II Binding Peptide Prediction Results

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### INPUT & PARAMETER INFORMATION

Antigen Name	test
Scanned on	Fri Feb 12 19:58:32 2010
Length of input sequence	934 amino acids
Number of nanomers from input sequence	926
Number of nanomers with <a href="#">obligatory P1 anchor residue</a>	256
Threshold setting	3
Number of alleles in query	51
Number of top scorers to be displayed	93

ALLELE: DRB1_0101	Threshold for 3 % with score: 0.14	Highest Score achievable by any peptide: 6
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Rank	Sequence	At Position	Score	% of Highest Score
1	LKKLVGINL	624	1.8000	30.00
2	WVAFAVTGL	560	1.6700	27.83
3	LRLLSLPRV	780	1.4700	24.50
4	FRSAAYWDI	212	1.0200	17.00
5	YGYEVSPVL	173	0.8700	14.50
6	YMRTDSTTL	341	0.7900	13.17
7	WQRTVASQM	423	0.7800	13.00
8	WHLLETLPK	120	0.7000	11.67

9	LRSMDLQTV	766	0.7000	11.67
10	VTLEDALRL	774	0.4000	6.67
11	WKKVAPKLS	182	0.3500	5.83
12	LVIVESPTK	19	0.3200	5.33
13	VKRMVFHEI	132	0.3000	5.00
14	VFSATGRTL	453	0.2900	4.83
15	VVGVDPASG	788	0.2500	4.17
16	YVHKKGSAL	548	0.2000	3.33
17	YELIWQRTV	419	0.1900	3.17
18	LEGIDAREV	632	0.1900	3.17
19	LYIISPEKR	81	0.1000	1.67
20	VIVESPTKA	20	0.0900	1.50
21	VQSVATRII	194	-0.0600	0
22	LVGINLEGI	627	-0.1000	0
23	ILPEPAADA	734	-0.1000	0
24	LDRLYGYEV	169	-0.2000	0
25	LQQEASRKL	311	-0.2100	0
26	YVRVGKNGP	655	-0.2500	0
27	FLKAYVETV	466	-0.4000	0
28	VKALEELGI	522	-0.4000	0
29	LVPSWVAFA	556	-0.4000	0
30	YIVESSRGH	39	-0.4100	0
31	YKSQPWARL	62	-0.5000	0
32	FGRLVDYDF	573	-0.5000	0
33	MVIKDGRFG	866	-0.5100	0
34	WDILAKLDA	218	-0.6000	0
35	LAKLDASVS	221	-0.6000	0
36	LIWQRTVAS	421	-0.6000	0
37	LERLVAGDT	665	-0.6000	0
38	LVTEDQIFT	819	-0.7000	0
39	LLSLPRVVG	782	-0.8000	0
40	YVAPAPRQY	369	-0.8100	0
41	IRPAGETFA	391	-0.8100	0
42	LRKGDEVIV	262	-0.9000	0

43	FRLYELIWQ	416	-0.9000	0
44	LRFSAERTM	319	-0.9300	0
45	LTAVAGRRV	242	-0.9600	0
46	WLNNFYFGG	602	-0.9600	0
47	YIISPEKRS	82	-1.0000	0
48	IVLDEGSAT	269	-1.0000	0
49	LGIGRPSTY	528	-1.0000	0
50	YPPFMTSTL	303	-1.0200	0
51	FEPLYIISP	78	-1.1000	0
52	FSAERTMSI	321	-1.1100	0
53	LETLKPRIP	123	-1.2100	0
54	IRDLPRAAS	48	-1.3000	0
55	WARLGVNVD	67	-1.3000	0
56	VVFSATGRT	452	-1.3000	0
57	FYFGGDHGV	606	-1.3000	0
58	YVTEILPEP	730	-1.3300	0
59	IDLVDAQET	157	-1.3500	0
60	LRITGMSGH	441	-1.4000	0
61	LVGGEADDA	477	-1.4000	0
62	LQVAEELFA	694	-1.4000	0
63	ITLDEALKI	828	-1.4000	0
64	LEQHFGRLV	569	-1.5100	0
65	FHEITEPAI	137	-1.5300	0
66	LPRVGVDP	785	-1.5500	0
67	FGPYVTEIL	727	-1.6000	0
68	MVFHEITEP	135	-1.7100	0
69	LRKGDDVAS	886	-1.8000	0
70	YENGYITYM	334	-1.8300	0
71	LDPETGHEI	712	-1.9000	0
72	ITAQNGRYG	799	-1.9100	0
73	FPGFLKAYV	463	-1.9200	0
74	LYGYEVSPV	172	-2.0000	0
75	VIVLDEGSA	268	-2.0000	0
76	VAFVAVTGLL	561	-2.0000	0

77	YITYMRTDS	338	-2.0100	0
78	MADARGMTL	431	-2.0100	0
79	IVAREGRFG	720	-2.0100	0
80	VGKNGPYLE	658	-2.0600	0
81	IRAAAEHPR	145	-2.1000	0
82	ITGMSGHQE	443	-2.1000	0
83	VRVGKNGPY	656	-2.1000	0
84	LKPRIPVKR	126	-2.2000	0
85	VFHEITEPA	136	-2.2000	0
86	INAARTQAR	354	-2.2000	0
87	FATPDAVRR	398	-2.2000	0
88	LTPGQRDI	492	-2.2000	0
89	VDPASGEEI	791	-2.2000	0
90	ITDERAAEL	895	-2.2000	0
91	IKLFDDTHG	643	-2.2300	0

ALLELE: DRB1_0102	Threshold for 3 % with score: 0.7	Highest Score achievable by any peptide: 6
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Rank	Sequence	At Position	Score	% of Highest Score
1	LKKLVGINL	624	2.8000	46.67
2	LRLLSLPRV	780	2.4700	41.17
3	LRSMDLQTV	766	1.7000	28.33
4	VTLEDALRL	774	1.4000	23.33
5	LVIVESPTK	19	1.3200	22.00
6	VKRMVFHEI	132	1.3000	21.67
7	VFSATGRTL	453	1.2900	21.50
8	VVGVDPASG	788	1.2500	20.83
9	LEGIDAREV	632	1.1900	19.83
10	LYIISPEKR	81	1.1000	18.33
11	VIVESPTKA	20	1.0900	18.17
12	FRSAAYWDI	212	1.0200	17.00
13	LTLQVAEEL	692	1.0000	16.67
14	VQSVATRII	194	0.9400	15.67

15	LVGINLEGI	627	0.9000	15.00
16	ILPEPAADA	734	0.9000	15.00
17	LDRLYGYEV	169	0.8000	13.33
18	LQQEASRKL	311	0.7900	13.17
19	WVAFAVTGL	560	0.6700	11.17
20	VKALEELGI	522	0.6000	10.00
21	LVPSWVAFA	556	0.6000	10.00
22	MVIKDGRFG	866	0.4900	8.17
23	LAKLDASVS	221	0.4000	6.67
24	LIWQRTVAS	421	0.4000	6.67
25	LERLVAGDT	665	0.4000	6.67
26	LVTEDQIFT	819	0.3000	5.00
27	LLSLPRVVG	782	0.2000	3.33
28	IRPAGETFA	391	0.1900	3.17
29	LRKGDEVIV	262	0.1000	1.67
30	LRFSAERTM	319	0.0700	1.17
31	LTAVAGRRV	242	0.0400	0.67
32	YGYEVSPVL	173	-0.1300	0
33	LETLKPRIP	123	-0.2100	0
34	YMRTDSTTL	341	-0.2100	0
35	WQRTVASQM	423	-0.2200	0
36	IRDLPRAAS	48	-0.3000	0
37	WHLLETLKP	120	-0.3000	0
38	VVFSATGRT	452	-0.3000	0
39	IDLVDAQET	157	-0.3500	0
40	LRITGMSGH	441	-0.4000	0
41	FLKAYVETV	466	-0.4000	0
42	LVGGEADDA	477	-0.4000	0
43	LQVAEELFA	694	-0.4000	0
44	ITLDEALKI	828	-0.4000	0
45	FGRLVDYDF	573	-0.5000	0
46	LEQHFGRLV	569	-0.5100	0
47	LPRVGVDP	785	-0.5500	0
48	WKKVAPKLS	182	-0.6500	0

49	MVFHEITEP	135	-0.7100	0
50	YVHKKGSAL	548	-0.8000	0
51	LRKGDDVAS	886	-0.8000	0
52	YELIWQRTV	419	-0.8100	0
53	FRLYELIWQ	416	-0.9000	0
54	LDPETGHEI	712	-0.9000	0
55	ITAQNGRYG	799	-0.9100	0
56	LYGYEVSPV	172	-1.0000	0
57	VIVLDEGSA	268	-1.0000	0
58	VAFVAVTGLL	561	-1.0000	0
59	MADARGMTL	431	-1.0100	0
60	IVAREGRFG	720	-1.0100	0
61	VGKNGPYLE	658	-1.0600	0
62	FEPLYIISP	78	-1.1000	0
63	IRAAAEHPR	145	-1.1000	0
64	ITGMSGHQE	443	-1.1000	0
65	VRVGKNGPY	656	-1.1000	0
66	FSAERTMSI	321	-1.1100	0
67	LKPRIPVKR	126	-1.2000	0
68	VFHEITEPA	136	-1.2000	0
69	INAARTQAR	354	-1.2000	0
70	LTPGQRLDI	492	-1.2000	0
71	VDPASGEEI	791	-1.2000	0
72	ITDERAAEL	895	-1.2000	0
73	IKLFDDTHG	643	-1.2300	0
74	YVRVGKNGP	655	-1.2500	0
75	VLDEGSATA	270	-1.3000	0
76	FYFGGDHGV	606	-1.3000	0
77	LSLPRVGV	783	-1.3000	0
78	LRELGTDPA	853	-1.3000	0
79	YIVESSRGH	39	-1.4100	0
80	LQTVTLEDA	771	-1.4500	0
81	LGSYIVES	35	-1.5000	0
82	YKSQPWARL	62	-1.5000	0

83	VAPAPRQYT	370	-1.5000	0
84	IVELTPDGH	500	-1.5000	0
85	VPSWVAFV	557	-1.5000	0
86	VTGLLEQHF	565	-1.5000	0
87	VTEILPEPA	731	-1.5000	0
88	FHEITEPAI	137	-1.5300	0
89	VESSRGHIR	41	-1.6000	0
90	LSAGRVQSV	189	-1.6000	0

ALLELE: DRB1_0301		Threshold for 3 % with score: 2.96	Highest Score achievable by any peptide: 9.5	
Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	6.3000	66.32
2	LLADDRARG	903	4.7000	49.47
3	VIKDGRFGP	867	4.6000	48.42
4	LRLLSLPRV	780	4.4000	46.32
5	LVPSWVAFV	556	4.3000	45.26
6	IVLDEGSAT	269	4.2700	44.95
7	ITLDEALKI	828	4.1000	43.16
8	LVIVESPTK	19	4.0000	42.11
9	VVFSATGRT	452	4.0000	42.11
10	LYIISPEKR	81	3.7000	38.95
11	VDYDFTAAM	577	3.7000	38.95
12	MTLSLRITG	437	3.5000	36.84
13	LVGINLEGI	627	3.4000	35.79
14	LGIGRPSTY	528	3.3700	35.47
15	IVESSRghi	40	3.3000	34.74
16	LGSgyIVES	35	3.2000	33.68
17	MVFHEITEP	135	3.2000	33.68
18	LIWQRTVAS	421	3.2000	33.68
19	LVAGDTGEP	668	3.2000	33.68
20	VVGVDPASG	788	3.2000	33.68
21	VGVDPASGE	789	3.0700	32.32

22	IRDLPRAAS	48	3.0000	31.58
23	VRVGKNGPY	656	3.0000	31.58
24	LDIDLVDAQ	155	2.9000	30.53
25	VTEDQIFTI	820	2.9000	30.53
26	LRSMDLQTV	766	2.8000	29.47
27	LLSLPRVVG	782	2.8000	29.47
28	YVRVGKNGP	655	2.7100	28.53
29	LGTDPASGK	856	2.6700	28.11
30	IVARERDRM	202	2.6000	27.37
31	LTPGQRLDI	492	2.6000	27.37
32	LRGLLKDVD	95	2.5000	26.32
33	LRFSAERTM	319	2.5000	26.32
34	ITPDELTQ	687	2.5000	26.32
35	LVGGEADDA	477	2.2000	23.16
36	MSIAQRLYE	327	2.1000	22.11
37	IGRPSTYSS	530	2.0500	21.58
38	IVESPTKAR	21	2.0000	21.05
39	INAARTQAR	354	2.0000	21.05
40	VQSVATRII	194	1.9000	20.00
41	LYGDEYVAP	364	1.9000	20.00
42	LTPDGHATN	503	1.9000	20.00
43	YVTDGETNA	876	1.9000	20.00
44	LRKGDEVIV	262	1.8000	18.95
45	YENGYITYM	334	1.8000	18.95
46	LGLDPETGH	710	1.8000	18.95
47	VKKRQKAAG	749	1.8000	18.95
48	LSLRITGMS	439	1.7000	17.89
49	LYGYEVSPV	172	1.6700	17.58
50	VAFAVTGLL	561	1.6600	17.47
51	LKPRIPVKR	126	1.6000	16.84
52	LSAGRVQSV	189	1.6000	16.84
53	LGTLRKGDE	259	1.6000	16.84
54	FRLYELIWQ	416	1.6000	16.84
55	VNSIKLFDD	640	1.6000	16.84



56	LRKGDDVAS	886	1.6000	16.84
57	WHLLETLPK	120	1.5000	15.79
58	YEVSPVLWK	175	1.5000	15.79
59	LFDDTHGRP	645	1.5000	15.79
60	VNVDADFEP	72	1.4000	14.74
61	LLETLPRI	122	1.4000	14.74
62	INLEGIDAR	630	1.4000	14.74
63	LSLPRVVG	783	1.4000	14.74
64	LKIYAEPKR	834	1.4000	14.74
65	MVIKDGRFG	866	1.4000	14.74
66	LRITGMSGH	441	1.3700	14.42
67	FLKAYVETV	466	1.3000	13.68
68	LQVTLEDA	771	1.2000	12.63
69	LRELGTDPA	853	1.2000	12.63
70	LAKLDASVS	221	1.1700	12.32
71	WVAVAVTGL	560	1.1600	12.21
72	YIISPEKRS	82	1.1000	11.58
73	YITYMRTDS	338	1.1000	11.58
74	VAGDTGEPT	669	1.1000	11.58
75	LEDALRLLS	776	1.1000	11.58
76	WQRTVASQM	423	1.0700	11.26
77	LKRGNDTRS	810	1.0700	11.26
78	VTDGETNAS	877	1.0100	10.63
79	VIVESPTKA	20	1.0000	10.53
80	LLKDVDLY	98	1.0000	10.53
81	VLWKKVAPK	180	1.0000	10.53
82	IRPAGETFA	391	1.0000	10.53
83	LVKALEELG	521	0.9000	9.47
84	FGGDHGVPD	608	0.9000	9.47
85	VAREGRFGP	721	0.9000	9.47
86	IFTITLDEA	825	0.9000	9.47
87	VGKNGPYLE	658	0.8500	8.95
88	WKKVAPKLS	182	0.8000	8.42
89	VAGRRVATG	245	0.8000	8.42

90	LPHLTPGQR	489	0.8000	8.42
91	LKKLVGINL	624	0.7600	8.00
92	LTLQVAEEL	692	0.7600	8.00
93	WDILAKLDA	218	0.7000	7.37

ALLELE: DRB1_0305	Threshold for 3 % with score: 1.7	Highest Score achievable by any peptide: 9.1
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	4.9000	53.85
2	FRLYELIWQ	416	3.3000	36.26
3	LVPSWVAFA	556	3.3000	36.26
4	LVIVESPTK	19	2.9000	31.87
5	YVTDGETNA	876	2.9000	31.87
6	YVRVGKNGP	655	2.7100	29.78
7	LDIDLVDAQ	155	2.6000	28.57
8	VIKDGRFGP	867	2.6000	28.57
9	IVLDEGSAT	269	2.5700	28.24
10	YEVSPVLWK	175	2.4000	26.37
11	LRLLSLPRV	780	2.4000	26.37
12	VVFSATGRT	452	2.3000	25.27
13	LLADRRARG	903	2.3000	25.27
14	ITPDELTQ	687	2.2000	24.18
15	ITLDEALKI	828	2.2000	24.18
16	YSSIIKTIQ	536	2.1000	23.08
17	LGSGYIVES	35	1.8000	19.78
18	LIWQRTVAS	421	1.8000	19.78
19	YIISPEKRS	82	1.7000	18.68
20	WDILAKLDA	218	1.7000	18.68
21	YITYMRTDS	338	1.7000	18.68
22	IRDLPRAAS	48	1.6000	17.58
23	LGTDPASGK	856	1.5700	17.25
24	WHLLETLPK	120	1.5000	16.48
25	LVGINLEGI	627	1.5000	16.48

26	YTRKVKNAQ	377	1.4100	15.49
27	IVESSRGHI	40	1.4000	15.38
28	WKKVAPKLS	182	1.4000	15.38
29	LGLDPETGH	710	1.3800	15.16
30	YENGYITYM	334	1.3000	14.29
31	FLKAYVETV	466	1.3000	14.29
32	LYIISPEKR	81	1.2000	13.19
33	MVFHEITEP	135	1.2000	13.19
34	LVGGEADDA	477	1.2000	13.19
35	WVAFAVTGL	560	1.2000	13.19
36	VDYDFTAAM	577	1.2000	13.19
37	LVAGDTGEP	668	1.2000	13.19
38	MTLSLRITG	437	1.1000	12.09
39	LGIGRPSTY	528	1.0700	11.76
40	VTEDQIFTI	820	1.0000	10.99
41	LRITGMSGH	441	0.9500	10.44
42	FGGDHGVDP	608	0.8000	8.79
43	LRSMDLQTV	766	0.8000	8.79
44	VVGVDPASG	788	0.8000	8.79
45	LTPGQRDI	492	0.7000	7.69
46	VRVGKNGPY	656	0.7000	7.69
47	YVTEILPEP	730	0.7000	7.69
48	VGVDPASGE	789	0.6700	7.36
49	IGRPSTYSS	530	0.6500	7.14
50	WQRTVASQM	423	0.5700	6.26
51	LRGLLDVD	95	0.4000	4.40
52	FAVTGLLEQ	563	0.4000	4.40
53	LLSLPRVVG	782	0.4000	4.40
54	FSAERTMSI	321	0.3000	3.30
55	LSLRITGMS	439	0.3000	3.30
56	FEPLYIISP	78	0.2000	2.20
57	FMTSTLQQE	306	0.2000	2.20
58	YFGGDHGVP	607	0.2000	2.20
59	LQTVTLEDA	771	0.2000	2.20

60	LRELGTDPA	853	0.2000	2.20
61	LRKGDDVAS	886	0.2000	2.20
62	WARLGVNVD	67	0.1100	1.21
63	IVARERDRM	202	0.1000	1.10
64	FRSAAYWDI	212	0.1000	1.10
65	LTPDGHATN	503	0.1000	1.10
66	YGYEVSPVL	173	-0.1000	0
67	VLWKKVAPK	180	-0.1000	0
68	LYGDEYVAP	364	-0.1000	0
69	IFTITLDEA	825	-0.1000	0
70	IVELTPDGH	500	-0.1200	0
71	LRKGDEVIV	262	-0.2000	0
72	WLNNFYFGG	602	-0.2000	0
73	LAKLDASVS	221	-0.2300	0
74	MSIAQRLYE	327	-0.3000	0
75	YVAPAPRQY	369	-0.3000	0
76	YELIWQRTV	419	-0.3000	0
77	VAFVAVTGLL	561	-0.3000	0
78	LEDALRLLS	776	-0.3000	0
79	YIVESSRGH	39	-0.3200	0
80	LYGYEVSPV	172	-0.3300	0
81	YVHKKGSAL	548	-0.3300	0
82	LKRGNDSRS	810	-0.3300	0
83	VTDGETNAS	877	-0.3900	0
84	VFHEITEPA	136	-0.4000	0
85	LSAGRVQSV	189	-0.4000	0
86	FDSLGLTRK	256	-0.4000	0
87	YMRTDSTTL	341	-0.4000	0
88	IWQRTVASQ	422	-0.4000	0

ALLELE: DRB1_0306	Threshold for 3 % with score: 2.08	Highest Score achievable by any peptide: 8.8		
Rank	Sequence	At Position	Score	% of Highest Score

1	MRTDSTTLS	342	5.9000	67.05
2	LVPSWVAFA	556	4.3000	48.86
3	LDIDLVDAQ	155	3.9000	44.32
4	ITLDEALKI	828	3.7000	42.05
5	IVLDEGSAT	269	3.3000	37.50
6	LLADRRARG	903	3.3000	37.50
7	ITPDETLQ	687	3.2000	36.36
8	LVGINLEGI	627	2.9000	32.95
9	LGSQYIVES	35	2.6800	30.45
10	LIWQRTVAS	421	2.6800	30.45
11	IRDLPRAAS	48	2.6000	29.55
12	LYIISPEKR	81	2.6000	29.55
13	LVIVESPTK	19	2.5000	28.41
14	LVGGEADDA	477	2.5000	28.41
15	YVRVGKNGP	655	2.4000	27.27
16	LGLDPETGH	710	2.3800	27.05
17	LGTDPASGK	856	2.3000	26.14
18	MVFHEITEP	135	2.2000	25.00
19	LTPGQRDI	492	2.2000	25.00
20	VDYDFTAAM	577	2.2000	25.00
21	VIKDGRFGP	867	2.1000	23.86
22	LRLSLPRV	780	2.0000	22.73
23	FRLYELIWQ	416	1.9800	22.50
24	YEVSPVLWK	175	1.9000	21.59
25	VVFSATGRT	452	1.9000	21.59
26	LRSMDLQTV	766	1.9000	21.59
27	YVTDGETNA	876	1.9000	21.59
28	LGIGRPSTY	528	1.8000	20.45
29	VVGVDPASG	788	1.8000	20.45
30	MTLSLRITG	437	1.7800	20.23
31	LRGLLDVD	95	1.7000	19.32
32	LRITGMSGH	441	1.6800	19.09
33	LQTVTLEDA	771	1.6000	18.18
34	LRELGTDP	853	1.5000	17.05

35	IVARERDRM	202	1.4000	15.91
36	VGVDPASGE	789	1.4000	15.91
37	YIISPEKRS	82	1.3000	14.77
38	VTDGETNAS	877	1.3000	14.77
39	LLSLPRVVG	782	1.2800	14.55
40	WDILAKLDA	218	1.2000	13.64
41	MSIAQRLYE	327	1.2000	13.64
42	LEDALRLLS	776	1.2000	13.64
43	IFTITLDEA	825	1.2000	13.64
44	IVELTPDGH	500	1.1800	13.41
45	IVESPTKAR	21	1.1000	12.50
46	YTRKVKNAQ	377	1.1000	12.50
47	LTPDGHATN	503	1.1000	12.50
48	YSSIIKTIQ	536	1.1000	12.50
49	VARSGLKK	618	1.1000	12.50
50	LRKGDDVAS	886	1.0800	12.27
51	VIVESPTKA	20	1.0000	11.36
52	IVESSRghi	40	1.0000	11.36
53	WHLLETLKP	120	1.0000	11.36
54	VFHEITEPA	136	1.0000	11.36
55	WKKVAPKLS	182	1.0000	11.36
56	IRPAGETFA	391	1.0000	11.36
57	LQVAEELFA	694	1.0000	11.36
58	VLWKKVAPK	180	0.9000	10.23
59	LVAGDTGEP	668	0.8000	9.09
60	VAGDTGEPT	669	0.8000	9.09
61	LYGDEYVAP	364	0.7800	8.86
62	LSAGRVQSV	189	0.7000	7.95
63	VQSVATRII	194	0.7000	7.95
64	LRFSAERTM	319	0.7000	7.95
65	YITYMRTDS	338	0.7000	7.95
66	FLKAYVETV	466	0.7000	7.95
67	LRKGDEVIV	262	0.6800	7.73
68	INAARTQAR	354	0.6000	6.82

69	IWQRTVASQ	422	0.6000	6.82
70	LAKLDASVS	221	0.5000	5.68
71	LSESAINAA	349	0.5000	5.68
72	IGRPSTYSS	530	0.5000	5.68
73	VTEDQIFTI	820	0.5000	5.68
74	LYGYEVSPV	172	0.4000	4.55
75	LTVASAEK	288	0.4000	4.55
76	VKKRQKAAG	749	0.4000	4.55
77	LKRGNDSRS	810	0.4000	4.55
78	VESPTKARK	22	0.3000	3.41
79	YENGYITYM	334	0.3000	3.41
80	VRVGKNGPY	656	0.3000	3.41
81	ILPEPAADA	734	0.3000	3.41
82	LSLPRVVG	783	0.2800	3.18
83	WVAFVAVTGL	560	0.2000	2.27
84	INLEGIDAR	630	0.2000	2.27
85	LTLQVAEEL	692	0.2000	2.27
86	LLKDVDELY	98	0.1000	1.14
87	VKRMVFHEI	132	0.1000	1.14
88	ITYMRTDST	339	0.1000	1.14
89	VAPAPRQYT	370	0.1000	1.14
90	VKALEELGI	522	0.1000	1.14
91	LKPRIPVKR	126	-0.0200	0

ALLELE: DRB1_0307	Threshold for 3 % with score: 2.08	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.9000	67.05
2	LVPSWVFA	556	4.3000	48.86
3	LDIDLVDQAQ	155	3.9000	44.32
4	ITLDEALKI	828	3.7000	42.05
5	IVLDEGSAT	269	3.3000	37.50
6	LLADRRARG	903	3.3000	37.50

7	ITPDELTQ	687	3.2000	36.36
8	LVGINLEGI	627	2.9000	32.95
9	LGSGYIVES	35	2.6800	30.45
10	LIWQRTVAS	421	2.6800	30.45
11	IRDLPRAAS	48	2.6000	29.55
12	LYIISPEKR	81	2.6000	29.55
13	LVIVESPTK	19	2.5000	28.41
14	LVGGEADDA	477	2.5000	28.41
15	YVRVGKNGP	655	2.4000	27.27
16	LGLDPETGH	710	2.3800	27.05
17	LGTDPASGK	856	2.3000	26.14
18	MVFHEITEP	135	2.2000	25.00
19	LTPGQRDI	492	2.2000	25.00
20	VDYDFTAAM	577	2.2000	25.00
21	VIKDGRFGP	867	2.1000	23.86
22	LRLSLPRV	780	2.0000	22.73
23	FRLYELIWQ	416	1.9800	22.50
24	YEVSPVLWK	175	1.9000	21.59
25	VVFSATGRT	452	1.9000	21.59
26	LRSMDLQTV	766	1.9000	21.59
27	YVTDGETNA	876	1.9000	21.59
28	LGIGRPSTY	528	1.8000	20.45
29	VVGVDPASG	788	1.8000	20.45
30	MTLSLRITG	437	1.7800	20.23
31	LRGLLKDVD	95	1.7000	19.32
32	LRITGMSGH	441	1.6800	19.09
33	LQTVTLEDA	771	1.6000	18.18
34	LRELGTDPA	853	1.5000	17.05
35	IVARERDRM	202	1.4000	15.91
36	VGVDPASGE	789	1.4000	15.91
37	YIISPEKRS	82	1.3000	14.77
38	VTDGETNAS	877	1.3000	14.77
39	LLSLPRVVG	782	1.2800	14.55
40	WDILAKLDA	218	1.2000	13.64



41	MSIAQRLYE	327	1.2000	13.64
42	LEDALRLLS	776	1.2000	13.64
43	IFTITLDEA	825	1.2000	13.64
44	IVELTPDGH	500	1.1800	13.41
45	IVESPTKAR	21	1.1000	12.50
46	YTRKVKNAQ	377	1.1000	12.50
47	LTPDGHATN	503	1.1000	12.50
48	YSSIIKTIQ	536	1.1000	12.50
49	VARSGLKK	618	1.1000	12.50
50	LRKGDDVAS	886	1.0800	12.27
51	VIVESPTKA	20	1.0000	11.36
52	IVESSRGIH	40	1.0000	11.36
53	WHLLETLKP	120	1.0000	11.36
54	VFHEITEPA	136	1.0000	11.36
55	WKKVAPKLS	182	1.0000	11.36
56	IRPAGETFA	391	1.0000	11.36
57	LQVAEELFA	694	1.0000	11.36
58	VLWKKVAPK	180	0.9000	10.23
59	LVAGDTGEP	668	0.8000	9.09
60	VAGDTGEPT	669	0.8000	9.09
61	LYGDEYVAP	364	0.7800	8.86
62	LSAGRVQSV	189	0.7000	7.95
63	VQSVATRII	194	0.7000	7.95
64	LRFSAERTM	319	0.7000	7.95
65	YITYMRTDS	338	0.7000	7.95
66	FLKAYVETV	466	0.7000	7.95
67	LRKGDEVIV	262	0.6800	7.73
68	INAARTQAR	354	0.6000	6.82
69	IWQRTVASQ	422	0.6000	6.82
70	LAKLDASVS	221	0.5000	5.68
71	LSESAINAA	349	0.5000	5.68
72	IGRPSTYSS	530	0.5000	5.68
73	VTEDQIFTI	820	0.5000	5.68
74	LYGYEVSPV	172	0.4000	4.55

75	LTVASAEK	288	0.4000	4.55
76	VKKRQKAAG	749	0.4000	4.55
77	LKRGNDSRS	810	0.4000	4.55
78	VESPTKARK	22	0.3000	3.41
79	YENGYITYM	334	0.3000	3.41
80	VRVGKNGPY	656	0.3000	3.41
81	ILPEPAADA	734	0.3000	3.41
82	LSLPRVGV	783	0.2800	3.18
83	WVAFAVTGL	560	0.2000	2.27
84	INLEGIDAR	630	0.2000	2.27
85	LTQVAEEL	692	0.2000	2.27
86	LLKDVELY	98	0.1000	1.14
87	VKRMVFHEI	132	0.1000	1.14
88	ITYMRTDST	339	0.1000	1.14
89	VAPAPRQYT	370	0.1000	1.14
90	VKALEELGI	522	0.1000	1.14
91	LKPRIPVKR	126	-0.0200	0

ALLELE: DRB1_0308	Threshold for 3 % with score: 2.08	Highest Score achievable by any peptide: 8.8		
Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.9000	67.05
2	LVPSWVFA	556	4.3000	48.86
3	LDIDLVDQA	155	3.9000	44.32
4	ITLDEALKI	828	3.7000	42.05
5	IVLDEGSAT	269	3.3000	37.50
6	LLADRRARG	903	3.3000	37.50
7	ITPDETLQ	687	3.2000	36.36
8	LVGINLEGI	627	2.9000	32.95
9	LGSGYIVES	35	2.6800	30.45
10	LIWQRTVAS	421	2.6800	30.45
11	IRDLPRAAS	48	2.6000	29.55
12	LYIISPEKR	81	2.6000	29.55

13	LVIVESPTK	19	2.5000	28.41
14	LVGGEADDA	477	2.5000	28.41
15	YVRVGKNGP	655	2.4000	27.27
16	LGLDPETGH	710	2.3800	27.05
17	LGTDPASGK	856	2.3000	26.14
18	MVFHEITEP	135	2.2000	25.00
19	LTPGQRDI	492	2.2000	25.00
20	VDYDFTAAM	577	2.2000	25.00
21	VIKDGRFGP	867	2.1000	23.86
22	LRLSLPRV	780	2.0000	22.73
23	FRLYELIWQ	416	1.9800	22.50
24	YEVSPVLWK	175	1.9000	21.59
25	VVFSATGRT	452	1.9000	21.59
26	LRSMDLQTV	766	1.9000	21.59
27	YVTDGETNA	876	1.9000	21.59
28	LGIGRPSTY	528	1.8000	20.45
29	VVGVDPASG	788	1.8000	20.45
30	MTLSLRITG	437	1.7800	20.23
31	LRGLLKDVD	95	1.7000	19.32
32	LRITGMSGH	441	1.6800	19.09
33	LQTVTLEDA	771	1.6000	18.18
34	LRELGTDPA	853	1.5000	17.05
35	IVARERDRM	202	1.4000	15.91
36	VGVDPASGE	789	1.4000	15.91
37	YIISPEKRS	82	1.3000	14.77
38	VTDGETNAS	877	1.3000	14.77
39	LLSLPRVVG	782	1.2800	14.55
40	WDILAKLDA	218	1.2000	13.64
41	MSIAQRLYE	327	1.2000	13.64
42	LEDALRLLS	776	1.2000	13.64
43	IFTITLDEA	825	1.2000	13.64
44	IVELTPDGH	500	1.1800	13.41
45	IVESPTKAR	21	1.1000	12.50
46	YTRKVKNAQ	377	1.1000	12.50

47	LTPDGHATN	503	1.1000	12.50
48	YSSIIKTIQ	536	1.1000	12.50
49	VARSGLKK	618	1.1000	12.50
50	LRKGDDVAS	886	1.0800	12.27
51	VIVESPTKA	20	1.0000	11.36
52	IVESSRGHI	40	1.0000	11.36
53	WHLLETLPK	120	1.0000	11.36
54	VFHEITEPA	136	1.0000	11.36
55	WKKVAPKLS	182	1.0000	11.36
56	IRPAGETFA	391	1.0000	11.36
57	LQVAEELFA	694	1.0000	11.36
58	VLWKKVAPK	180	0.9000	10.23
59	LVAGDTGEP	668	0.8000	9.09
60	VAGDTGEPT	669	0.8000	9.09
61	LYGDEYVAP	364	0.7800	8.86
62	LSAGRVQSV	189	0.7000	7.95
63	VQSVATRII	194	0.7000	7.95
64	LRFSAERTM	319	0.7000	7.95
65	YITYMRTDS	338	0.7000	7.95
66	FLKAYVETV	466	0.7000	7.95
67	LRKGDEVIV	262	0.6800	7.73
68	INAARTQAR	354	0.6000	6.82
69	IWQRTVASQ	422	0.6000	6.82
70	LAKLDASVS	221	0.5000	5.68
71	LSESAINAA	349	0.5000	5.68
72	IGRPSTYSS	530	0.5000	5.68
73	VTEDQIFTI	820	0.5000	5.68
74	LYGYEVSPV	172	0.4000	4.55
75	LTVASAE EK	288	0.4000	4.55
76	VKKRQKAAG	749	0.4000	4.55
77	LKRGNDSRS	810	0.4000	4.55
78	VESPTKARK	22	0.3000	3.41
79	YENGYITYM	334	0.3000	3.41
80	VRVGKNGPY	656	0.3000	3.41

81	ILPEPAADA	734	0.3000	3.41
82	LSLPRVVG	783	0.2800	3.18
83	WVAFVTGL	560	0.2000	2.27
84	INLEGIDAR	630	0.2000	2.27
85	LTLQVAEEL	692	0.2000	2.27
86	LLKDVDELY	98	0.1000	1.14
87	VKRMVFHEI	132	0.1000	1.14
88	ITYMRTDST	339	0.1000	1.14
89	VAPAPRQYT	370	0.1000	1.14
90	VKALEELGI	522	0.1000	1.14
91	LKPRIPVKR	126	-0.0200	0

ALLELE: DRB1\_0309    Threshold for 3 % with score: 2.4    Highest Score achievable by any peptide: 9.5

Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.3000	55.79
2	YVRVGKNGP	655	3.7100	39.05
3	LLADRRARG	903	3.7000	38.95
4	VIKDGRFGP	867	3.6000	37.89
5	LRLLSLPRV	780	3.4000	35.79
6	LVPSWVAFA	556	3.3000	34.74
7	IVLDEGSAT	269	3.2700	34.42
8	ITLDEALKI	828	3.1000	32.63
9	LVIVESPTK	19	3.0000	31.58
10	VVFSATGRT	452	3.0000	31.58
11	YVTDGETNA	876	2.9000	30.53
12	YENGYITYM	334	2.8000	29.47
13	LYIISPEKR	81	2.7000	28.42
14	VDYDFTAAM	577	2.7000	28.42
15	FRLYELIWQ	416	2.6000	27.37
16	WHLLETLPK	120	2.5000	26.32
17	YEVSPVLWK	175	2.5000	26.32
18	MTLSLRITG	437	2.5000	26.32

19	LVGINLEGI	627	2.4000	25.26
20	LGIGRPSTY	528	2.3700	24.95
21	IVESSRGHI	40	2.3000	24.21
22	FLKAYVETV	466	2.3000	24.21
23	LGSGYIVES	35	2.2000	23.16
24	MVFHEITEP	135	2.2000	23.16
25	LIWQRTVAS	421	2.2000	23.16
26	LVAGDTGEP	668	2.2000	23.16
27	VVGVDPASG	788	2.2000	23.16
28	WVAFAVTGL	560	2.1600	22.74
29	YIISPEKRS	82	2.1000	22.11
30	YITYMRTDS	338	2.1000	22.11
31	WQRTVASQM	423	2.0700	21.79
32	VGVDPASGE	789	2.0700	21.79
33	IRDLPRAAS	48	2.0000	21.05
34	VRVGKNGPY	656	2.0000	21.05
35	LDIDLVAQ	155	1.9000	20.00
36	FGGDHGVDP	608	1.9000	20.00
37	VTEDQIFTI	820	1.9000	20.00
38	WKKVAPKLS	182	1.8000	18.95
39	LRSMDLQTV	766	1.8000	18.95
40	LLSLPRVVG	782	1.8000	18.95
41	WDILAKLDA	218	1.7000	17.89
42	YVTEILPEP	730	1.7000	17.89
43	LGTDPASGK	856	1.6700	17.58
44	IVARERDRM	202	1.6000	16.84
45	FMTSTLQQE	306	1.6000	16.84
46	LTPGQRDI	492	1.6000	16.84
47	LRGLLKDVD	95	1.5000	15.79
48	LRFSAERTM	319	1.5000	15.79
49	ITPDELTQ	687	1.5000	15.79
50	YSSIIKTIQ	536	1.4000	14.74
51	WARLGVNVD	67	1.2100	12.74
52	FEPLYIISP	78	1.2000	12.63

53	FSAERTMSI	321	1.2000	12.63
54	LVGGEADDA	477	1.2000	12.63
55	WLNNFYFGG	602	1.2000	12.63
56	YFGGDHGVV	607	1.2000	12.63
57	MSIAQRLYE	327	1.1000	11.58
58	IGRPSTYSS	530	1.0500	11.05
59	IVESPTKAR	21	1.0000	10.53
60	FRSAAYWDI	212	1.0000	10.53
61	INAARTQAR	354	1.0000	10.53
62	YVAPAPRQY	369	1.0000	10.53
63	VQSVATRII	194	0.9000	9.47
64	LYGDEYVAP	364	0.9000	9.47
65	LTPDGHATN	503	0.9000	9.47
66	YGYEVSPVL	173	0.8600	9.05
67	LRKGDEVIV	262	0.8000	8.42
68	LGLDPETGH	710	0.8000	8.42
69	VKKRQKAAG	749	0.8000	8.42
70	YTRKVKNAQ	377	0.7100	7.47
71	YELIWQRTV	419	0.7000	7.37
72	LSLRITGMS	439	0.7000	7.37
73	LYGYEVSPV	172	0.6700	7.05
74	VAFAVTGLL	561	0.6600	6.95
75	YVHKKGSAL	548	0.6300	6.63
76	YLGSGYIVE	34	0.6000	6.32
77	LKPRI PVKR	126	0.6000	6.32
78	LSAGRVQSV	189	0.6000	6.32
79	LGTLRKGDE	259	0.6000	6.32
80	VNSIKLFDD	640	0.6000	6.32
81	LRKGDDVAS	886	0.6000	6.32
82	YMRTDSTTL	341	0.5600	5.89
83	LFDDTHGRP	645	0.5000	5.26
84	VNVDA DFEP	72	0.4000	4.21
85	LLET LKPRI	122	0.4000	4.21
86	INLEGIDAR	630	0.4000	4.21

87	LSLPRVVG	783	0.4000	4.21
88	LKIYAEPKR	834	0.4000	4.21
89	MVIKDGRFG	866	0.4000	4.21
90	LRITGMSGH	441	0.3700	3.89
91	FGPYVTEIL	727	0.3600	3.79
92	FPGFLKAYV	463	0.3000	3.16
93	LQTVTLEDA	771	0.2000	2.11

ALLELE: DRB1_0311	Threshold for 3 % with score: 2.08	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.9000	67.05
2	LVPSWVAFA	556	4.3000	48.86
3	LDIDLVDAQ	155	3.9000	44.32
4	ITLDEALKI	828	3.7000	42.05
5	IVLDEGSAT	269	3.3000	37.50
6	LLADRRARG	903	3.3000	37.50
7	ITPDELTLQ	687	3.2000	36.36
8	LVGINLEGI	627	2.9000	32.95
9	LGSYIVES	35	2.6800	30.45
10	LIWQRTVAS	421	2.6800	30.45
11	IRDLPRAAS	48	2.6000	29.55
12	LYIISPEKR	81	2.6000	29.55
13	LVIVESPTK	19	2.5000	28.41
14	LVGGEADDA	477	2.5000	28.41
15	YVRVGKNGP	655	2.4000	27.27
16	LGLDPETGH	710	2.3800	27.05
17	LGTDPASGK	856	2.3000	26.14
18	MVFHEITEP	135	2.2000	25.00
19	LTPGQRDI	492	2.2000	25.00
20	VDYDFTAAM	577	2.2000	25.00
21	VIKDGRFGP	867	2.1000	23.86
22	LRLSLPRV	780	2.0000	22.73



23	FRLYELIWQ	416	1.9800	22.50
24	YEVSPVLWK	175	1.9000	21.59
25	VVFSATGRT	452	1.9000	21.59
26	LRSMDLQTV	766	1.9000	21.59
27	YVTDGETNA	876	1.9000	21.59
28	LGIGRPSTY	528	1.8000	20.45
29	VVGVDPASG	788	1.8000	20.45
30	MTLSLRITG	437	1.7800	20.23
31	LRGLLKDVD	95	1.7000	19.32
32	LRITGMSGH	441	1.6800	19.09
33	LQVTLEDA	771	1.6000	18.18
34	LRELGTDPA	853	1.5000	17.05
35	IVARERDRM	202	1.4000	15.91
36	VGVDPASGE	789	1.4000	15.91
37	YIISPEKRS	82	1.3000	14.77
38	VTDGETNAS	877	1.3000	14.77
39	LLSLPRVVG	782	1.2800	14.55
40	WDILAKLDA	218	1.2000	13.64
41	MSIAQRLYE	327	1.2000	13.64
42	LEDALRLLS	776	1.2000	13.64
43	IFTITLDEA	825	1.2000	13.64
44	IVELTPDGH	500	1.1800	13.41
45	IVESPTKAR	21	1.1000	12.50
46	YTRKVKNAQ	377	1.1000	12.50
47	LTPDGHATN	503	1.1000	12.50
48	YSSIIKTIQ	536	1.1000	12.50
49	VARSGLKK	618	1.1000	12.50
50	LRKGDDVAS	886	1.0800	12.27
51	VIVESPTKA	20	1.0000	11.36
52	IVESSRGHI	40	1.0000	11.36
53	WHLLETLPK	120	1.0000	11.36
54	VFHEITEPA	136	1.0000	11.36
55	WKKVAPKLS	182	1.0000	11.36
56	IRPAGETFA	391	1.0000	11.36

57	LQVAEELFA	694	1.0000	11.36
58	VLWKKVAPK	180	0.9000	10.23
59	LVAGDTGEP	668	0.8000	9.09
60	VAGDTGEPT	669	0.8000	9.09
61	LYGDEYVAP	364	0.7800	8.86
62	LSAGRVQSV	189	0.7000	7.95
63	VQSVATRII	194	0.7000	7.95
64	LRFSAERTM	319	0.7000	7.95
65	YITYMRTDS	338	0.7000	7.95
66	FLKAYVETV	466	0.7000	7.95
67	LRKGDEVIV	262	0.6800	7.73
68	INAARTQAR	354	0.6000	6.82
69	IWQRTVASQ	422	0.6000	6.82
70	LAKLDASVS	221	0.5000	5.68
71	LSESAINAA	349	0.5000	5.68
72	IGRPSTYSS	530	0.5000	5.68
73	VTEDQIFTI	820	0.5000	5.68
74	LYGYEVSPV	172	0.4000	4.55
75	LTVASAE EK	288	0.4000	4.55
76	VKKRQKAAG	749	0.4000	4.55
77	LKRGNDSRS	810	0.4000	4.55
78	VESPTKARK	22	0.3000	3.41
79	YENGYITYM	334	0.3000	3.41
80	VRVGKNGPY	656	0.3000	3.41
81	ILPEPAADA	734	0.3000	3.41
82	LSLPRVVG V	783	0.2800	3.18
83	WVAFV TGL	560	0.2000	2.27
84	INLEGIDAR	630	0.2000	2.27
85	LTLQVAEEL	692	0.2000	2.27
86	LLKDVD ELY	98	0.1000	1.14
87	VKRMVFHEI	132	0.1000	1.14
88	ITYMRTDST	339	0.1000	1.14
89	VAPAPRQYT	370	0.1000	1.14
90	VKALEELGI	522	0.1000	1.14

91	LKPRIPVKR	126	-0.0200	0
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ALLELE: DRB1_0401	Threshold for 3 % with score: 1.48	Highest Score achievable by any peptide: 8.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.1000	59.30
2	WHLLETLPK	120	3.9000	45.35
3	VFHEITEPA	136	3.6000	41.86
4	FSAERTMSI	321	3.6000	41.86
5	LIWQRTVAS	421	3.5800	41.63
6	LVPSWVAFA	556	3.1000	36.05
7	YIVESSRGH	39	2.9800	34.65
8	YEVSPVLWK	175	2.7000	31.40
9	YMRTDSTTL	341	2.4000	27.91
10	LRELGTDPA	853	2.4000	27.91
11	LRITGMSGH	441	2.1800	25.35
12	YGYEVSPVL	173	2.1000	24.42
13	VVFSATGRT	452	2.1000	24.42
14	VIVESPTKA	20	2.0000	23.26
15	FDSLGLTRK	256	2.0000	23.26
16	WQRTVASQM	423	2.0000	23.26
17	ILPEPAADA	734	1.8000	20.93
18	ITLDEALKI	828	1.8000	20.93
19	LVIVESPTK	19	1.7000	19.77
20	LDIDLVDQA	155	1.7000	19.77
21	YGDEYVAPA	365	1.6000	18.60
22	MVFHEITEP	135	1.5000	17.44
23	LYIISPEKR	81	1.4000	16.28
24	YIISPEKRS	82	1.4000	16.28
25	FLKAYVETV	466	1.4000	16.28
26	VDYDFTAAM	577	1.4000	16.28
27	IVESPTKAR	21	1.3000	15.12
28	WARLGVNVD	67	1.3000	15.12

29	FAVTGLLEQ	563	1.3000	15.12
30	VLDEGSATA	270	1.2000	13.95
31	VTLEDALRL	774	1.2000	13.95
32	ITYMRTDST	339	1.1000	12.79
33	FRLYELIWQ	416	1.0800	12.56
34	WVAFAVTGL	560	1.0000	11.63
35	YVTDGETNA	876	1.0000	11.63
36	LVGINLEGI	627	0.9000	10.47
37	INLEGIDAR	630	0.9000	10.47
38	INAARTQAR	354	0.7000	8.14
39	WKKVAPKLS	182	0.6000	6.98
40	IVLDEGSAT	269	0.6000	6.98
41	LQQEASRKL	311	0.5000	5.81
42	YVTEILPEP	730	0.5000	5.81
43	LRSMDLQTV	766	0.5000	5.81
44	LRLLSLPRV	780	0.5000	5.81
45	IVELTPDGH	500	0.4800	5.58
46	LGTDPASGK	856	0.4000	4.65
47	VKRMVFHEI	132	0.3000	3.49
48	LAKLDASVS	221	0.3000	3.49
49	FGPYVTEIL	727	0.3000	3.49
50	FTITLDEAL	826	0.3000	3.49
51	YKSQPWARL	62	0.1000	1.16
52	LVTEDQIFT	819	-0.0200	0
53	VQSVATRII	194	-0.1000	0
54	LLRSMDLQT	765	-0.1000	0
55	FEPLYIISP	78	-0.1200	0
56	FSARLTAVA	238	-0.3000	0
57	YPPFMTSTL	303	-0.4000	0
58	VRRELDGPN	404	-0.4000	0
59	LLKDVDELY	98	-0.5000	0
60	VGVDPASGE	789	-0.5000	0
61	LGLDPETGH	710	-0.5200	0
62	LTVASAEK	288	-0.6000	0

63	LVGGEADDA	477	-0.6000	0
64	VAFVAVTGLL	561	-0.6000	0
65	VARSGLKK	618	-0.6000	0
66	VVGVDPASG	788	-0.6000	0
67	WDILAKLDA	218	-0.7000	0
68	YDFTAAMED	579	-0.7000	0
69	VDGETNAS	877	-0.7000	0
70	LRKGDDVAS	886	-0.7200	0
71	FRSAAYWDI	212	-0.8000	0
72	IFTITLDEA	825	-0.8000	0
73	FMTSTLQQE	306	-0.9000	0
74	LSLRITGMS	439	-0.9000	0
75	VRVGKNGPY	656	-0.9000	0
76	YLKRGNDSR	809	-0.9000	0
77	FGPYVTDGE	873	-0.9000	0
78	VASITDERA	892	-0.9000	0
79	IRDLPRAAS	48	-1.0000	0
80	IRPAGETFA	391	-1.0000	0
81	LQVAEELFA	694	-1.0000	0
82	FGGDHGVDP	608	-1.0200	0
83	VDAQETRRI	160	-1.1000	0
84	VLWKKVAPK	180	-1.1000	0
85	VARERDRMA	203	-1.1000	0
86	VKALEELGI	522	-1.1000	0
87	WLNNFYFGG	602	-1.1000	0
88	YLGSGYIVE	34	-1.1200	0

ALLELE: DRB1_0402	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 9.6		
Rank	Sequence	At Position	Score	% of Highest Score
1	VQSVATRII	194	4.0000	41.67
2	LIWQRTVAS	421	3.5000	36.46
3	IGRPSTYSS	530	3.4000	35.42

4	MVIKDGRFG	866	2.9000	30.21
5	MVFHEITEP	135	2.8000	29.17
6	INAARTQAR	354	2.8000	29.17
7	LVIVESPTK	19	2.6000	27.08
8	MRTDSTTLS	342	2.6000	27.08
9	IWQRTVASQ	422	2.3000	23.96
10	LVPSWVAFA	556	2.3000	23.96
11	IVAREGRFG	720	2.3000	23.96
12	LRSMDLQTV	766	2.3000	23.96
13	LSLRITGMS	439	2.2000	22.92
14	WHLLETLPK	120	1.8000	18.75
15	LRITGMSGH	441	1.7800	18.54
16	VLWKKVAPK	180	1.7000	17.71
17	FRLYELIWQ	416	1.7000	17.71
18	LKPRIPVKR	126	1.6000	16.67
19	VDAQETRRI	160	1.6000	16.67
20	FSARLTAVA	238	1.6000	16.67
21	VKRMVFHEI	132	1.5000	15.62
22	WVAFAVTGL	560	1.4000	14.58
23	LEGIDAREV	632	1.3800	14.37
24	LRKGDDVAS	886	1.3000	13.54
25	VHKKGSALV	549	1.2000	12.50
26	VTDGETNAS	877	1.2000	12.50
27	VAGRRVATG	245	1.1000	11.46
28	VPSWVAFAV	557	1.1000	11.46
29	YIVESSRGH	39	1.0800	11.25
30	FRSAAYWDI	212	1.0000	10.42
31	LRFSAERTM	319	0.9000	9.38
32	IDAREVNSI	635	0.9000	9.38
33	IVESPTKAR	21	0.8000	8.33
34	LGSGYIVES	35	0.8000	8.33
35	MAFRSAAYW	210	0.8000	8.33
36	LEQHFGRLV	569	0.8000	8.33
37	IKTIQDRGY	540	0.7800	8.12

38	LQQEASRKL	311	0.6000	6.25
39	VVGVDPASG	788	0.6000	6.25
40	LYGYEVSPV	172	0.5000	5.21
41	YVAPAPRQY	369	0.5000	5.21
42	VVFSATGRT	452	0.5000	5.21
43	VAPKLSAGR	185	0.4000	4.17
44	YMRTDSTTL	341	0.4000	4.17
45	IKLFDDTHG	643	0.4000	4.17
46	LSAGRVQSV	189	0.3000	3.12
47	LQVAEELFA	694	0.3000	3.12
48	LKRGNDSRS	810	0.3000	3.12
49	LYIISPEKR	81	0.2800	2.92
50	YEVSPVLWK	175	0.2000	2.08
51	IRPAGETFA	391	0.2000	2.08
52	VFSATGRTL	453	0.2000	2.08
53	VRVGKNGPY	656	0.2000	2.08
54	LRELGTDPA	853	0.2000	2.08
55	WKKVAPKLS	182	0.1000	1.04
56	VATRIIVAR	197	0.1000	1.04
57	LADRRARGP	904	0.1000	1.04
58	LETLKPRIP	123	-0.1000	0
59	IIVARERDR	201	-0.1000	0
60	FDSLGLTRK	256	-0.1000	0
61	LGIGRPSTY	528	-0.1000	0
62	IYVRVGKNG	654	-0.1000	0
63	LVAGDTGEP	668	-0.1000	0
64	LRLSLPRV	780	-0.2000	0
65	LSLPRVGV	783	-0.2000	0
66	LVGINLEGI	627	-0.2200	0
67	LAKLDASVS	221	-0.3000	0
68	YELIWQRTV	419	-0.3200	0
69	YPPFMTSTL	303	-0.4000	0
70	WQRTVASQM	423	-0.4000	0
71	VAFAVTGLL	561	-0.4000	0

72	LVGGEADDA	477	-0.5000	0
73	VIVESPTKA	20	-0.6000	0
74	VFHEITEPA	136	-0.6000	0
75	VATGRDFDS	250	-0.6000	0
76	LTFPGFLKA	461	-0.6000	0
77	FAVTGLLEQ	563	-0.6000	0
78	LVDYDFTAA	576	-0.6000	0
79	LLRSMDLQT	765	-0.6000	0
80	ITLDEALKI	828	-0.6000	0
81	IRAAAEHPR	145	-0.7000	0
82	ILAKLDASV	220	-0.7000	0
83	MTSTLQQA	307	-0.7000	0
84	IQDRGYVHK	543	-0.7000	0
85	VGKNGPYLE	658	-0.7000	0
86	IPVKRMVFH	130	-0.7200	0
87	YLKRGNSR	809	-0.8000	0
88	ITEPAIRAA	140	-0.9000	0
89	FGPYVTEIL	727	-0.9000	0
90	VARERDRMA	203	-1.0000	0
91	LTVASAEK	288	-1.0000	0

ALLELE: DRB1_0404	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	4.1000	46.59
2	LVIVESPTK	19	3.8000	43.18
3	LIWQRTVAS	421	3.6000	40.91
4	WHLLETLPK	120	2.7000	30.68
5	LRELGTDPA	853	2.7000	30.68
6	VQSVATRII	194	2.6000	29.55
7	LVPSWVAFA	556	2.6000	29.55
8	WVAFAVTGL	560	2.4000	27.27
9	IGRPSTYSS	530	2.3000	26.14



10	LRITGMSGH	441	2.2800	25.91
11	LAKLDASVS	221	2.2000	25.00
12	LRSMDLQTV	766	2.2000	25.00
13	ITYMRTDST	339	2.1000	23.86
14	LYIISPEKR	81	1.8000	20.45
15	VKRMVFHEI	132	1.8000	20.45
16	VVGVDPASG	788	1.8000	20.45
17	VVFSATGRT	452	1.7000	19.32
18	INAARTQAR	354	1.5000	17.05
19	LYGYEVSPV	172	1.4000	15.91
20	IKLFDDTHG	643	1.4000	15.91
21	LRLLSLPRV	780	1.4000	15.91
22	LVGINLEGI	627	1.3000	14.77
23	FRLYELIWQ	416	1.2800	14.55
24	YPPFMTSTL	303	1.2000	13.64
25	VFHEITEPA	136	1.1000	12.50
26	VIVESPTKA	20	0.9000	10.23
27	MVFHEITEP	135	0.9000	10.23
28	FDSLGLTRK	256	0.8000	9.09
29	IVELTPDGH	500	0.7800	8.86
30	WARLGVNVD	67	0.6000	6.82
31	IRPAGETFA	391	0.5000	5.68
32	VAFAVTGLL	561	0.5000	5.68
33	YMRTDSTTL	341	0.3000	3.41
34	IRDLPRAAS	48	0.2000	2.27
35	ILPEPAADA	734	0.2000	2.27
36	VLWKKVAPK	180	0.1000	1.14
37	WQRTVASQM	423	0.1000	1.14
38	FSAERTMSI	321	-0.1000	0
39	VDYDFTAAM	577	-0.1000	0
40	LQTVTLEDA	771	-0.1000	0
41	ITLDEALKI	828	-0.1000	0
42	IVESPTKAR	21	-0.2000	0
43	YEVSPVLWK	175	-0.2000	0

44	IVLDEGSAT	269	-0.2000	0
45	LEGIDAREV	632	-0.2000	0
46	LSLRITGMS	439	-0.3000	0
47	VKALEELGI	522	-0.3000	0
48	LVDYDFTAA	576	-0.3000	0
49	YIVESSRGH	39	-0.3200	0
50	LKKLVGINL	624	-0.3200	0
51	VLDEGSATA	270	-0.4000	0
52	VHKKGSALV	549	-0.4000	0
53	LQVAEELFA	694	-0.4000	0
54	FGPYVTEIL	727	-0.4000	0
55	IFTITLDEA	825	-0.4000	0
56	LGTDPASGK	856	-0.4000	0
57	VTDGETNAS	877	-0.4000	0
58	LTVASAEK	288	-0.5000	0
59	FLKAYVETV	466	-0.5000	0
60	LSLPRVGV	783	-0.5000	0
61	LKRGNDSRS	810	-0.5000	0
62	VASITDERA	892	-0.5000	0
63	VDAQETRRI	160	-0.6000	0
64	VRVGKNGPY	656	-0.6000	0
65	LERLVAGDT	665	-0.6000	0
66	LDIDLVDAQ	155	-0.7000	0
67	YVRVGKNGP	655	-0.7000	0
68	LTLQVAEEL	692	-0.7000	0
69	MDLQTVTLE	769	-0.7000	0
70	LRKGDDVAS	886	-0.7000	0
71	VNSIKLFDD	640	-0.7500	0
72	LQQEASRKL	311	-0.8000	0
73	IKTIQDRGY	540	-0.8000	0
74	VTEILPEPA	731	-0.8000	0
75	VTLEDALRL	774	-0.8000	0
76	LGIGRPSTY	528	-0.9000	0
77	LVAGDTGEP	668	-0.9000	0

78	FEPLYIISP	78	-0.9200	0
79	VIVLDEGSA	268	-1.0000	0
80	ITPDETLQ	687	-1.0000	0
81	LLRSMDLQT	765	-1.0000	0
82	LETLKPRIP	123	-1.1000	0
83	FRSAAYWDI	212	-1.1000	0
84	IWQRTVASQ	422	-1.1000	0
85	VPSWVAFVAV	557	-1.1000	0
86	FGRLVDYDF	573	-1.1000	0
87	LGSFYIVES	35	-1.2000	0
88	IDLVDAQET	157	-1.2000	0
89	VAPKLSAGR	185	-1.2000	0
90	LPRAASDVP	51	-1.3000	0
91	LTFPGFLKA	461	-1.3000	0

ALLELE: DRB1_0405	Threshold for 3 % with score: 2.0	Highest Score achievable by any peptide: 9.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	WVAFVAVTGL	560	4.4000	46.81
2	WARLGVNVD	67	4.3000	45.74
3	WHLLETLPK	120	4.1000	43.62
4	YPPFMTSTL	303	3.2000	34.04
5	MRTDSTTLS	342	3.1000	32.98
6	FRLYELIQ	416	3.0800	32.77
7	LIWQRTVAS	421	2.6000	27.66
8	LRITGMSGH	441	2.5000	26.60
9	FGPYVTDGE	873	2.4000	25.53
10	YMRTDSTTL	341	2.3000	24.47
11	WQRTVASQM	423	2.2000	23.40
12	LVIVESPTK	19	2.1000	22.34
13	VVGVDPASG	788	2.1000	22.34
14	ITYMRTDST	339	2.0000	21.28
15	YIVESSRGH	39	1.9000	20.21

16	VQSVATRII	194	1.8000	19.15
17	IKLFDDTHG	643	1.7000	18.09
18	LRELGTDPA	853	1.7000	18.09
19	VVFSATGRT	452	1.6000	17.02
20	LVPSWVAFA	556	1.6000	17.02
21	FGPYVTEIL	727	1.6000	17.02
22	LRSMDLQTV	766	1.5000	15.96
23	IGRPSTYSS	530	1.3000	13.83
24	MDLQTVTLE	769	1.3000	13.83
25	LAKLDASVS	221	1.2000	12.77
26	FDSLGLTRK	256	1.1000	11.70
27	FSAERTMSI	321	1.1000	11.70
28	VKRMVFHEI	132	1.0000	10.64
29	WKKVAPKLS	182	1.0000	10.64
30	IVELTPDGH	500	1.0000	10.64
31	VNSIKLFDD	640	0.9500	10.11
32	LYIISPEKR	81	0.8000	8.51
33	FLKAYVETV	466	0.8000	8.51
34	FGRLVDYDF	573	0.8000	8.51
35	LYGYEVSPV	172	0.7000	7.45
36	YVRVGKNGP	655	0.7000	7.45
37	LRLLSLPRV	780	0.7000	7.45
38	VGVDPASGE	789	0.7000	7.45
39	INAARTQAR	354	0.5000	5.32
40	VAFAVTGLL	561	0.5000	5.32
41	LVGINLEGI	627	0.5000	5.32
42	FEPLYIISP	78	0.4800	5.11
43	FMTSTLQQE	306	0.4000	4.26
44	ITGMSGHQE	443	0.4000	4.26
45	YLGSGYIVE	34	0.3800	4.04
46	YKSQPWARL	62	0.3000	3.19
47	MVFHEITEP	135	0.3000	3.19
48	YSSIIKTIQ	536	0.3000	3.19
49	YDFTAAMED	579	0.3000	3.19

50	YGYEVSPVL	173	0.2000	2.13
51	VFHEITEPA	136	0.1000	1.06
52	YEVSPVLWK	175	0.1000	1.06
53	FRSAAYWDI	212	0.1000	1.06
54	FAVTGLLEQ	563	0.1000	1.06
55	VIVESPTKA	20	-0.1000	0
56	VGKNGPYLE	658	-0.1000	0
57	LRGLLKDVD	95	-0.2000	0
58	YVHKKGSAL	548	-0.2000	0
59	IVLDEGSAT	269	-0.3000	0
60	LKKLVGINL	624	-0.3200	0
61	WLNNFYFGG	602	-0.4500	0
62	VKNAQEAHE	381	-0.5000	0
63	IRPAGETFA	391	-0.5000	0
64	VRVGKNGPY	656	-0.5000	0
65	YWDILAKLD	217	-0.6000	0
66	MSIAQRLYE	327	-0.6000	0
67	YITYMRTDS	338	-0.6000	0
68	YELIWQRTV	419	-0.6000	0
69	IKTIQDRGY	540	-0.7000	0
70	YLERLVAGD	664	-0.7000	0
71	LERLVAGDT	665	-0.7000	0
72	LTLQVAEEL	692	-0.7000	0
73	IRDLPRAAS	48	-0.8000	0
74	FSARLTAVA	238	-0.8000	0
75	LQQEASRKL	311	-0.8000	0
76	YENGYITYM	334	-0.8000	0
77	LGIGRPSTY	528	-0.8000	0
78	ILPEPAADA	734	-0.8000	0
79	VTLEDALRL	774	-0.8000	0
80	LDIDLVDAQ	155	-0.9000	0
81	WDILAKLDA	218	-0.9000	0
82	VRRELDGPN	404	-0.9000	0
83	LEGIDAREV	632	-0.9000	0

84	ITLDEALKI	828	-0.9000	0
85	YGDEYVAPA	365	-1.0000	0
86	FGGDHGVDP	608	-1.0000	0
87	LLSLPRVVG	782	-1.0000	0
88	MVIKDGRFG	866	-1.0000	0

ALLELE: DRB1_0408	Threshold for 3 % with score: 1.2	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	WHLLETLPK	120	3.7000	42.05
2	WVAVAVTGL	560	3.4000	38.64
3	MRTDSTTSL	342	3.1000	35.23
4	LVIVESPTK	19	2.8000	31.82
5	LIWQRTVAS	421	2.6000	29.55
6	FRLYELIWQ	416	2.2800	25.91
7	YPPFMTSTL	303	2.2000	25.00
8	FDSLGLTRK	256	1.8000	20.45
9	LRELGTDPA	853	1.7000	19.32
10	WARLGVNVD	67	1.6000	18.18
11	VQSVATRII	194	1.6000	18.18
12	LVPSWVAVA	556	1.6000	18.18
13	YMRTDSTTL	341	1.3000	14.77
14	IGRPSTYSS	530	1.3000	14.77
15	LRITGMSGH	441	1.2800	14.55
16	LAKLDASVS	221	1.2000	13.64
17	LRSMDLQTV	766	1.2000	13.64
18	ITYMRTDST	339	1.1000	12.50
19	WQRTVASQM	423	1.1000	12.50
20	WKKVAPKLS	182	1.0000	11.36
21	FSAERTMSI	321	0.9000	10.23
22	LYIISPEKR	81	0.8000	9.09
23	VKRMVFHEI	132	0.8000	9.09
24	YEVSPVLWK	175	0.8000	9.09

25	VVGVDPASG	788	0.8000	9.09
26	VVFSATGRT	452	0.7000	7.95
27	YIVESSRGH	39	0.6800	7.73
28	FGPYVTEIL	727	0.6000	6.82
29	INAARTQAR	354	0.5000	5.68
30	FLKAYVETV	466	0.5000	5.68
31	LYGYEVSPV	172	0.4000	4.55
32	IKLFDDTHG	643	0.4000	4.55
33	LRLLSLPRV	780	0.4000	4.55
34	LVGINLEGI	627	0.3000	3.41
35	YVRVGKNGP	655	0.3000	3.41
36	VFHEITEPA	136	0.1000	1.14
37	FEPLYIISP	78	0.0800	0.91
38	VIVESPTKA	20	-0.1000	0
39	MVFHEITEP	135	-0.1000	0
40	FRSAAYWDI	212	-0.1000	0
41	FGRLVDYDF	573	-0.1000	0
42	IVELTPDGH	500	-0.2200	0
43	IRPAGETFA	391	-0.5000	0
44	YSSIIKTIQ	536	-0.5000	0
45	VAFAVTGLL	561	-0.5000	0
46	YITYMRTDS	338	-0.6000	0
47	FGPYVTDGE	873	-0.6000	0
48	YKSQPWARL	62	-0.7000	0
49	FAVTGLLEQ	563	-0.7000	0
50	IRDLPRAAS	48	-0.8000	0
51	YGYEVSPVL	173	-0.8000	0
52	FSARLTAVA	238	-0.8000	0
53	ILPEPAADA	734	-0.8000	0
54	VLWKKVAPK	180	-0.9000	0
55	WDILAKLDA	218	-0.9000	0
56	YELIWQRTV	419	-0.9000	0
57	YGDEYVAPA	365	-1.0000	0
58	YVTDGETNA	876	-1.0000	0

59	YIISPEKRS	82	-1.1000	0
60	YVAPAPRQY	369	-1.1000	0
61	VDYDFTAAM	577	-1.1000	0
62	LQTVTLEDA	771	-1.1000	0
63	ITLDEALKI	828	-1.1000	0
64	IVESPTKAR	21	-1.2000	0
65	IVLDEGSAT	269	-1.2000	0
66	YVHKKGSAL	548	-1.2000	0
67	LEGIDAREV	632	-1.2000	0
68	LSLRITGMS	439	-1.3000	0
69	VKALEELGI	522	-1.3000	0
70	LVDYDFTAA	576	-1.3000	0
71	LKKLVGINL	624	-1.3200	0
72	VLDEGSATA	270	-1.4000	0
73	VHKKGSALV	549	-1.4000	0
74	LQVAEELFA	694	-1.4000	0
75	IFTITLDEA	825	-1.4000	0
76	LGTDPASGK	856	-1.4000	0
77	VTDGETNAS	877	-1.4000	0
78	LTVASAEK	288	-1.5000	0
79	LSLPRVGV	783	-1.5000	0
80	LKRGNDSRS	810	-1.5000	0
81	VASITDERA	892	-1.5000	0
82	VDAQETRRI	160	-1.6000	0
83	VRVGKNGPY	656	-1.6000	0
84	LERLVAGDT	665	-1.6000	0
85	LDIDLVAQ	155	-1.7000	0
86	LTLQVAEEL	692	-1.7000	0
87	MDLQTVTLE	769	-1.7000	0
88	LRKGDDVAS	886	-1.7000	0
89	WLNNFYFGG	602	-1.7500	0
90	VNSIKLFDD	640	-1.7500	0
91	LQQEASRKL	311	-1.8000	0
92	IKTIQDRGY	540	-1.8000	0



ALLELE: DRB1_0410	Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 9.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	4.1000	43.62
2	LIWQRTVAS	421	3.6000	38.30
3	LRITGMSGH	441	3.5000	37.23
4	WVAFAVTGL	560	3.4000	36.17
5	WARLGVNVD	67	3.3000	35.11
6	LVIVESPTK	19	3.1000	32.98
7	WHLLETLKP	120	3.1000	32.98
8	VVGVDPASG	788	3.1000	32.98
9	ITYMRTDST	339	3.0000	31.91
10	VQSVATRII	194	2.8000	29.79
11	IKLFDDTHG	643	2.7000	28.72
12	LRELGTDPA	853	2.7000	28.72
13	VVFSATGRT	452	2.6000	27.66
14	LVPSWVAFA	556	2.6000	27.66
15	LRSMDLQTV	766	2.5000	26.60
16	IGRPSTYSS	530	2.3000	24.47
17	MDLQTVTLE	769	2.3000	24.47
18	LAKLDASVS	221	2.2000	23.40
19	YPPFMTSTL	303	2.2000	23.40
20	FRLYELIWQ	416	2.0800	22.13
21	VKRMVFHEI	132	2.0000	21.28
22	IVELTPDGH	500	2.0000	21.28
23	VNSIKLFDD	640	1.9500	20.74
24	LYIISPEKR	81	1.8000	19.15
25	LYGYEVSPV	172	1.7000	18.09
26	LRLLSLPRV	780	1.7000	18.09
27	VGVDPASGE	789	1.7000	18.09
28	INAARTQAR	354	1.5000	15.96
29	VAFAVTGLL	561	1.5000	15.96
30	LVGINLEGI	627	1.5000	15.96

31	ITGMSGHQE	443	1.4000	14.89
32	FGPYVTDGE	873	1.4000	14.89
33	MVFHEITEP	135	1.3000	13.83
34	YMRTDSTTL	341	1.3000	13.83
35	WQRTVASQM	423	1.2000	12.77
36	VFHEITEPA	136	1.1000	11.70
37	LDIVELTPD	498	1.0000	10.64
38	VDYDFTAAM	577	1.0000	10.64
39	LNNFYFGGD	603	1.0000	10.64
40	VIVESPTKA	20	0.9000	9.57
41	YIVESSRGH	39	0.9000	9.57
42	VGKNGPYLE	658	0.9000	9.57
43	LRGLLDVD	95	0.8000	8.51
44	IVLDEGSAT	269	0.7000	7.45
45	LKKLVGINL	624	0.6800	7.23
46	FGPYVTEIL	727	0.6000	6.38
47	VKNAQEAHE	381	0.5000	5.32
48	IRPAGETFA	391	0.5000	5.32
49	VRVGKNGPY	656	0.5000	5.32
50	MSIAQRLYE	327	0.4000	4.26
51	IKTIQDRGY	540	0.3000	3.19
52	LERLVAGDT	665	0.3000	3.19
53	LTLQVAEEL	692	0.3000	3.19
54	IRDLPRAAS	48	0.2000	2.13
55	LQQEASRKL	311	0.2000	2.13
56	LGIGRPSTY	528	0.2000	2.13
57	ILPEPAADA	734	0.2000	2.13
58	VTLEDALRL	774	0.2000	2.13
59	LDIDLVDQAQ	155	0.1000	1.06
60	FDSLGTLRK	256	0.1000	1.06
61	FSAERTMSI	321	0.1000	1.06
62	VRRELDGPN	404	0.1000	1.06
63	LEGIDAREV	632	0.1000	1.06
64	ITLDEALKI	828	0.1000	1.06

65	VKALEELGI	522	-0.1000	0
66	VHKKGSALV	549	-0.1000	0
67	LSDSITPDE	683	-0.1000	0
68	LLRSMDLQT	765	-0.1000	0
69	LQTVTLEDA	771	-0.1000	0
70	IVESPTKAR	21	-0.2000	0
71	FLKAYVETV	466	-0.2000	0
72	FGRLVDYDF	573	-0.2000	0
73	ITPDETLQ	687	-0.2000	0
74	LSLPRVVG	783	-0.2000	0
75	IDLVDAQET	157	-0.3000	0
76	LRFS AERTM	319	-0.3000	0
77	IWQRTVASQ	422	-0.3000	0
78	LSLRITGMS	439	-0.3000	0
79	LKAYVETVD	467	-0.3000	0
80	LVDYDFTAA	576	-0.3000	0
81	YVRVGKNGP	655	-0.3000	0
82	LGLDPETGH	710	-0.3000	0
83	VDAQETRRI	160	-0.4000	0
84	VLDEGSATA	270	-0.4000	0
85	LQVAEELFA	694	-0.4000	0
86	IFTITLDEA	825	-0.4000	0
87	VTDGETNAS	877	-0.4000	0
88	LVAGDTGEP	668	-0.5000	0
89	LKRGNDSRS	810	-0.5000	0

ALLELE: DRB1_0421	Threshold for 3 % with score: 2.3	Highest Score achievable by any peptide: 9
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.5000	61.11
2	WHLLETLP	120	4.9000	54.44
3	FSAERTMSI	321	4.5000	50.00
4	LIWQRTVAS	421	3.9800	44.22

5	VFHEITEPA	136	3.6000	40.00
6	WQRTVASQM	423	3.5000	38.89
7	YMRTDSTTL	341	3.3600	37.33
8	LVPSWVAFA	556	3.1000	34.44
9	YGYEVSPVL	173	3.0600	34.00
10	LYIISPEKR	81	2.9000	32.22
11	VDYDFTAAM	577	2.9000	32.22
12	IVESPTKAR	21	2.8000	31.11
13	YEVSPVLWK	175	2.8000	31.11
14	VVFSATGRT	452	2.8000	31.11
15	ITLDEALKI	828	2.7000	30.00
16	MVFHEITEP	135	2.5000	27.78
17	YIVESSRGH	39	2.4000	26.67
18	WARLGVNVD	67	2.4000	26.67
19	FLKAYVETV	466	2.4000	26.67
20	INLEGIDAR	630	2.4000	26.67
21	LRELGTDPA	853	2.4000	26.67
22	INAARTQAR	354	2.2000	24.44
23	VTLEDALRL	774	2.1600	24.00
24	FDSLGLTRK	256	2.1000	23.33
25	VIVESPTKA	20	2.0000	22.22
26	WVAFAVTGL	560	1.9600	21.78
27	LVIVESPTK	19	1.8000	20.00
28	YIISPEKRS	82	1.8000	20.00
29	ITYMRTDST	339	1.8000	20.00
30	LVGINLEGI	627	1.8000	20.00
31	ILPEPAADA	734	1.8000	20.00
32	YGDEYVAPA	365	1.6000	17.78
33	LRITGMSGH	441	1.6000	17.78
34	YVTEILPEP	730	1.5000	16.67
35	LRSMDLQTV	766	1.5000	16.67
36	LRLLSLPRV	780	1.5000	16.67
37	LQQEASRKL	311	1.4600	16.22
38	IVLDEGSAT	269	1.3000	14.44

39	FGPYVTEIL	727	1.2600	14.00
40	FTITLDEAL	826	1.2600	14.00
41	VKRMVFHEI	132	1.2000	13.33
42	VLDEGSATA	270	1.2000	13.33
43	YKSQPWARL	62	1.0600	11.78
44	LDIDLVDAQ	155	1.0000	11.11
45	WKKVAPKLS	182	1.0000	11.11
46	YVETVDELV	470	1.0000	11.11
47	YVTDGETNA	876	1.0000	11.11
48	LTLQVAEEL	692	0.9600	10.67
49	VGVDPASGE	789	0.9000	10.00
50	FEPLYIISP	78	0.8800	9.78
51	LLKDVDELY	98	0.8000	8.89
52	VQSVATRII	194	0.8000	8.89
53	VVGVDPASG	788	0.8000	8.89
54	LGVNVDADF	70	0.7000	7.78
55	LAKLDASVS	221	0.7000	7.78
56	LVTEDQIFT	819	0.6800	7.56
57	FAVTGLLEQ	563	0.6000	6.67
58	FGRLVDYDF	573	0.6000	6.67
59	LLRSMDLQT	765	0.6000	6.67
60	YLKRGNDSR	809	0.6000	6.67
61	YPPFMTSTL	303	0.5600	6.22
62	FMTSTLQQE	306	0.5000	5.56
63	LGTDPASGK	856	0.5000	5.56
64	FGPYVTDGE	873	0.5000	5.56
65	VRRELDGPN	404	0.4000	4.44
66	IGRPSTYSS	530	0.4000	4.44
67	YDFTAAMED	579	0.4000	4.44
68	VRVGKNGPY	656	0.4000	4.44
69	FRLYELIWQ	416	0.3800	4.22
70	VAFAVTGLL	561	0.3600	4.00
71	LRFSAERTM	319	0.3000	3.33
72	WLNNFYFGG	602	0.3000	3.33

73	YLGSGYIVE	34	0.2800	3.11
74	VASQMADAR	427	0.2000	2.22
75	FRSAAYWDI	212	0.1000	1.11
76	FGGDHGVDP	608	0.0800	0.89
77	YENGYITYM	334	-0.1000	0
78	IVELTPDGH	500	-0.1000	0
79	VDAQETRRI	160	-0.2000	0
80	VKALEELGI	522	-0.2000	0
81	YVRVGKNGP	655	-0.2000	0
82	LVAGDTGEP	668	-0.2000	0
83	LYGDEYVAP	364	-0.2200	0
84	FSARLTAVA	238	-0.3000	0
85	VTDGETNAS	877	-0.3000	0
86	LRKGDDVAS	886	-0.3200	0
87	LPRAASDVP	51	-0.4000	0
88	YLATDGDRE	106	-0.4000	0
89	YVAPAPRQY	369	-0.4000	0
90	LYGYEVSPV	172	-0.5000	0
91	LTVASAEK	288	-0.5000	0

ALLELE: DRB1_0423	Threshold for 3 % with score: 1.68	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	4.1000	46.59
2	LVIVESPTK	19	3.8000	43.18
3	LIWQRTVAS	421	3.6000	40.91
4	WHLLETLPK	120	2.7000	30.68
5	LRELGTDPA	853	2.7000	30.68
6	VQSVATRII	194	2.6000	29.55
7	LVPSWVAFA	556	2.6000	29.55
8	WVAFAVTGL	560	2.4000	27.27
9	IGRPSTYSS	530	2.3000	26.14
10	LRITGMSGH	441	2.2800	25.91

11	LAKLDASVS	221	2.2000	25.00
12	LRSMDLQTV	766	2.2000	25.00
13	ITYMRTDST	339	2.1000	23.86
14	LYIISPEKR	81	1.8000	20.45
15	VKRMVFHEI	132	1.8000	20.45
16	VVGVDPASG	788	1.8000	20.45
17	VVFSATGRT	452	1.7000	19.32
18	INAARTQAR	354	1.5000	17.05
19	LYGYEVSPV	172	1.4000	15.91
20	IKLFDDTHG	643	1.4000	15.91
21	LRLLSLPRV	780	1.4000	15.91
22	LVGINLEGI	627	1.3000	14.77
23	FRLYELIWQ	416	1.2800	14.55
24	YPPFMTSTL	303	1.2000	13.64
25	VFHEITEPA	136	1.1000	12.50
26	VIVESPTKA	20	0.9000	10.23
27	MVFHEITEP	135	0.9000	10.23
28	FDSLGLTRK	256	0.8000	9.09
29	IVELTPDGH	500	0.7800	8.86
30	WARLGVNVD	67	0.6000	6.82
31	IRPAGETFA	391	0.5000	5.68
32	VAFAVTGLL	561	0.5000	5.68
33	YMRTDSTTL	341	0.3000	3.41
34	IRDLPRAAS	48	0.2000	2.27
35	ILPEPAADA	734	0.2000	2.27
36	VLWKKVAPK	180	0.1000	1.14
37	WQRTVASQM	423	0.1000	1.14
38	FSAERTMSI	321	-0.1000	0
39	VDYDFTAAM	577	-0.1000	0
40	LQTVTLEDA	771	-0.1000	0
41	ITLDEALKI	828	-0.1000	0
42	IVESPTKAR	21	-0.2000	0
43	YEVSPVLWK	175	-0.2000	0
44	IVLDEGSAT	269	-0.2000	0

45	LEGIDAREV	632	-0.2000	0
46	LSLRITGMS	439	-0.3000	0
47	VKALEELGI	522	-0.3000	0
48	LVDYDFTAA	576	-0.3000	0
49	YIVESSRGH	39	-0.3200	0
50	LKKLVGINL	624	-0.3200	0
51	VLDEGSATA	270	-0.4000	0
52	VHKKGSALV	549	-0.4000	0
53	LQVAEELFA	694	-0.4000	0
54	FGPYVTEIL	727	-0.4000	0
55	IFTITLDEA	825	-0.4000	0
56	LGTDPASGK	856	-0.4000	0
57	VTDGETNAS	877	-0.4000	0
58	LTVASAEK	288	-0.5000	0
59	FLKAYVETV	466	-0.5000	0
60	LSLPRVGV	783	-0.5000	0
61	LKRGNDSRS	810	-0.5000	0
62	VASITDERA	892	-0.5000	0
63	VDAQETRRI	160	-0.6000	0
64	VRVGKNGPY	656	-0.6000	0
65	LERLVAGDT	665	-0.6000	0
66	LDIDLVAQ	155	-0.7000	0
67	YVRVGKNGP	655	-0.7000	0
68	LTLQVAEEL	692	-0.7000	0
69	MDLQVTLE	769	-0.7000	0
70	LRKGDDVAS	886	-0.7000	0
71	VNSIKLFDD	640	-0.7500	0
72	LQQEASRKL	311	-0.8000	0
73	IKTIQDRGY	540	-0.8000	0
74	VTEILPEPA	731	-0.8000	0
75	VTLEDALRL	774	-0.8000	0
76	LGIGRPSTY	528	-0.9000	0
77	LVAGDTGEP	668	-0.9000	0
78	FEPLYIISP	78	-0.9200	0



79	VIVLDEGSA	268	-1.0000	0
80	ITPDELTQ	687	-1.0000	0
81	LLRSMDLQT	765	-1.0000	0
82	LETLKPRIP	123	-1.1000	0
83	FRSAAYWDI	212	-1.1000	0
84	IWQRTVASQ	422	-1.1000	0
85	VPSWVAFAV	557	-1.1000	0
86	FGRLVDYDF	573	-1.1000	0
87	LGSYIVES	35	-1.2000	0
88	IDLVDAQET	157	-1.2000	0
89	VAPKLSAGR	185	-1.2000	0
90	LPRAASDVP	51	-1.3000	0
91	LTFPGFLKA	461	-1.3000	0

ALLELE: DRB1_0426		Threshold for 3 % with score: 1.6	Highest Score achievable by any peptide: 8.6	
Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.1000	59.30
2	WHLLETLPK	120	3.9000	45.35
3	VFHEITEPA	136	3.6000	41.86
4	FSAERTMSI	321	3.6000	41.86
5	LIWQRTVAS	421	3.5800	41.63
6	LVPSWVAFA	556	3.1000	36.05
7	YIVESSRGH	39	2.9800	34.65
8	YEVSPVLWK	175	2.7000	31.40
9	YMRTDSTTL	341	2.4000	27.91
10	LRELGTDPA	853	2.4000	27.91
11	LRITGMSGH	441	2.1800	25.35
12	YGYEVSPVL	173	2.1000	24.42
13	VVFSATGRT	452	2.1000	24.42
14	VIVESPTKA	20	2.0000	23.26
15	FDSLGLTRK	256	2.0000	23.26
16	WQRTVASQM	423	2.0000	23.26

17	ILPEPAADA	734	1.8000	20.93
18	ITLDEALKI	828	1.8000	20.93
19	LVIVESPTK	19	1.7000	19.77
20	LDIDLVDAQ	155	1.7000	19.77
21	YGDEYVAPA	365	1.6000	18.60
22	MVFHEITEP	135	1.5000	17.44
23	LYIISPEKR	81	1.4000	16.28
24	YIISPEKRS	82	1.4000	16.28
25	FLKAYVETV	466	1.4000	16.28
26	VDYDFTAAM	577	1.4000	16.28
27	IVESPTKAR	21	1.3000	15.12
28	WARLGVNVD	67	1.3000	15.12
29	FAVTGLLEQ	563	1.3000	15.12
30	VLDEGSATA	270	1.2000	13.95
31	VTLEDALRL	774	1.2000	13.95
32	ITYMRTDST	339	1.1000	12.79
33	FRLYELIWQ	416	1.0800	12.56
34	WVAFAVTGL	560	1.0000	11.63
35	YVTDGETNA	876	1.0000	11.63
36	LVGINLEGI	627	0.9000	10.47
37	INLEGIDAR	630	0.9000	10.47
38	INAARTQAR	354	0.7000	8.14
39	WKKVAPKLS	182	0.6000	6.98
40	IVLDEGSAT	269	0.6000	6.98
41	LQQEASRKL	311	0.5000	5.81
42	YVTEILPEP	730	0.5000	5.81
43	LRSMDLQTV	766	0.5000	5.81
44	LRLLSLPRV	780	0.5000	5.81
45	IVELTPDGH	500	0.4800	5.58
46	LGTDPASGK	856	0.4000	4.65
47	VKRMVFHEI	132	0.3000	3.49
48	LAKLDASVS	221	0.3000	3.49
49	FGPYVTEIL	727	0.3000	3.49
50	FTITLDEAL	826	0.3000	3.49

51	YKSQPWARL	62	0.1000	1.16
52	LVTEDQIFT	819	-0.0200	0
53	VQSVATRII	194	-0.1000	0
54	LLRSMDLQT	765	-0.1000	0
55	FEPLYIISP	78	-0.1200	0
56	FSARLTAVA	238	-0.3000	0
57	YPPFMTSTL	303	-0.4000	0
58	VRRELDGPN	404	-0.4000	0
59	LLKDVDELY	98	-0.5000	0
60	VGVDPASGE	789	-0.5000	0
61	LGLDPETGH	710	-0.5200	0
62	LTVASAEK	288	-0.6000	0
63	LVGGEADDA	477	-0.6000	0
64	VAFAVTGLL	561	-0.6000	0
65	VARSGLKK	618	-0.6000	0
66	VVGVDPASG	788	-0.6000	0
67	WDILAKLDA	218	-0.7000	0
68	YDFTAAMED	579	-0.7000	0
69	VTDGETNAS	877	-0.7000	0
70	LRKGDDVAS	886	-0.7200	0
71	FRSAAYWDI	212	-0.8000	0
72	IFTITLDEA	825	-0.8000	0
73	FMTSTLQQE	306	-0.9000	0
74	LSLRITGMS	439	-0.9000	0
75	VRVGKNGPY	656	-0.9000	0
76	YLKRGNDSR	809	-0.9000	0
77	FGPYVTDGE	873	-0.9000	0
78	VASITDERA	892	-0.9000	0
79	IRDLPRAAS	48	-1.0000	0
80	IRPAGETFA	391	-1.0000	0
81	LQVAEELFA	694	-1.0000	0
82	FGGDHGVDP	608	-1.0200	0
83	VDAQETRRI	160	-1.1000	0
84	VLWKKVAPK	180	-1.1000	0

85	VARERDRMA	203	-1.1000	0
86	VKALEELGI	522	-1.1000	0
87	WLNNFYFGG	602	-1.1000	0
88	YLGSGYIVE	34	-1.1200	0

ALLELE: DRB1_0701	Threshold for 3 % with score: 4.1	Highest Score achievable by any peptide: 11.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	YMRTDSTTL	341	8.1000	69.83
2	WVAFVTGL	560	6.7000	57.76
3	FRSAAYWDI	212	6.2000	53.45
4	LVGINLEGI	627	5.8000	50.00
5	WQRTVASQM	423	5.7000	49.14
6	VQSVATRII	194	5.3200	45.86
7	FTITLDEAL	826	4.7000	40.52
8	LKKLVGINL	624	4.5000	38.79
9	YVHKKGSAL	548	4.2000	36.21
10	VTLEDALRL	774	4.2000	36.21
11	FGPYVTEIL	727	4.1200	35.52
12	FLKAYVETV	466	4.0000	34.48
13	ITLDEALKI	828	4.0000	34.48
14	VKRMVFHEI	132	3.9000	33.62
15	YLGSGYIVE	34	3.8000	32.76
16	YELIWQRTV	419	3.8000	32.76
17	YPPFMTSTL	303	3.7200	32.07
18	VVFSATGRT	452	3.7200	32.07
19	IVESSRGI	40	3.7000	31.90
20	YGYEVSPVL	173	3.7000	31.90
21	LRFSAERTM	319	3.7000	31.90
22	LQQEASRKL	311	3.5000	30.17
23	LRITGMSGH	441	3.5000	30.17
24	VFSATGRTL	453	3.5000	30.17
25	FSAERTMSI	321	3.4200	29.48

26	YVRVGKNGP	655	3.4000	29.31
27	YEVSPVLWK	175	3.3000	28.45
28	LRSMDLQTV	766	3.2000	27.59
29	VAFAVTGLL	561	3.1200	26.90
30	LEGIDAREV	632	3.1000	26.72
31	LVPSWVAFA	556	3.0000	25.86
32	FRLYELIWQ	416	2.9000	25.00
33	LVIVESPTK	19	2.8000	24.14
34	LKDVDLYL	99	2.8000	24.14
35	LTLQVAEEL	692	2.8000	24.14
36	YVETVDELV	470	2.7000	23.28
37	LTPGQRDI	492	2.7000	23.28
38	WHLLETLPK	120	2.5200	21.72
39	IAWHLETL	118	2.5000	21.55
40	FMTSTLQQE	306	2.5000	21.55
41	VKALEELGI	522	2.4000	20.69
42	YKSQPWARL	62	2.3000	19.83
43	LLETLPRI	122	2.3000	19.83
44	MADARGMTL	431	2.3000	19.83
45	FAVTGLLEQ	563	2.3000	19.83
46	FDDTHGRPI	646	2.3000	19.83
47	LLRSMDLQT	765	2.3000	19.83
48	LRLSLPRV	780	2.3000	19.83
49	YVAPAPRQY	369	2.2000	18.97
50	MTLSLRITG	437	2.2000	18.97
51	LSLPRVGV	783	2.2000	18.97
52	LYIISPEKR	81	2.1000	18.10
53	LTAVAGRRV	242	2.0000	17.24
54	YENGYITYM	334	1.9000	16.38
55	YIISPEKRS	82	1.8000	15.52
56	MVFHEITEP	135	1.8000	15.52
57	LYGYEVSPV	172	1.7000	14.66
58	WKKVAPKLS	182	1.7000	14.66
59	VPSWVAFAV	557	1.7000	14.66

60	FGRLVDYDF	573	1.7000	14.66
61	VARSGGLKK	618	1.7000	14.66
62	VDPASGEEI	791	1.7000	14.66
63	VSPVLWKKV	177	1.5000	12.93
64	YDFTAAMED	579	1.5000	12.93
65	IDAREVNSI	635	1.5000	12.93
66	FHEITEPAI	137	1.4000	12.07
67	LVTEDQIFT	819	1.4000	12.07
68	YIVESSRGH	39	1.3000	11.21
69	FSATGRTL	454	1.3000	11.21
70	LEQHFGRLV	569	1.3000	11.21
71	LRKGDEVIV	262	1.2000	10.34
72	VTEDQIFTI	820	1.2000	10.34
73	IDLVDAQET	157	1.1000	9.48
74	VHKKGSALV	549	1.1000	9.48
75	VNSIKLFDD	640	1.1000	9.48
76	VRVGKNGPY	656	1.1000	9.48
77	LQTVTLEDA	771	1.1000	9.48
78	VVGVDPASG	788	1.1000	9.48
79	IVESPTKAR	21	1.0200	8.79
80	MSIAQRLYE	327	1.0000	8.62
81	FYFGGDHGV	606	1.0000	8.62
82	FEPLYIISP	78	0.9000	7.76
83	LGIGRPSTY	528	0.9000	7.76
84	WLNNFYFGG	602	0.9000	7.76
85	LWKKVAPKL	181	0.8000	6.90
86	LSAGRVQSV	189	0.8000	6.90
87	IDDFRLYEL	413	0.8000	6.90
88	FPGFLKAYV	463	0.8000	6.90
89	MVIKDGRFG	866	0.8000	6.90
90	LDRLYGYEV	169	0.7000	6.03
91	IVLDEGSAT	269	0.7000	6.03
92	MTSTLQQA	307	0.6000	5.17
93	WDILAKLDA	218	0.5000	4.31

ALLELE: DRB1_0703	Threshold for 3 % with score: 4.0	Highest Score achievable by any peptide: 11.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	YMRTDSTTL	341	8.1000	69.83
2	WVAFVTGL	560	6.7000	57.76
3	FRSAAYWDI	212	6.2000	53.45
4	LVGINLEGI	627	5.8000	50.00
5	WQRTVASQM	423	5.7000	49.14
6	VQSVATRII	194	5.3200	45.86
7	FTITLDEAL	826	4.7000	40.52
8	LKKLVGINL	624	4.5000	38.79
9	YVHKKGSAL	548	4.2000	36.21
10	VTLEDALRL	774	4.2000	36.21
11	FGPYVTEIL	727	4.1200	35.52
12	FLKAYVETV	466	4.0000	34.48
13	ITLDEALKI	828	4.0000	34.48
14	VKRMVFHEI	132	3.9000	33.62
15	YLGSGYIVE	34	3.8000	32.76
16	YELIWQRTV	419	3.8000	32.76
17	YPPFMTSTL	303	3.7200	32.07
18	VVFSATGRT	452	3.7200	32.07
19	IVESSRGI	40	3.7000	31.90
20	YGYEVSPVL	173	3.7000	31.90
21	LRFSAERTM	319	3.7000	31.90
22	LQQEASRKL	311	3.5000	30.17
23	LRITGMSGH	441	3.5000	30.17
24	VFSATGRTL	453	3.5000	30.17
25	FSAERTMSI	321	3.4200	29.48
26	YVRVGKNGP	655	3.4000	29.31
27	YEVSPVLWK	175	3.3000	28.45
28	LRSMDLQTV	766	3.2000	27.59
29	VAFVTGLL	561	3.1200	26.90
30	LEGIDAREV	632	3.1000	26.72

31	LVPSWVAFA	556	3.0000	25.86
32	FRLYELIWQ	416	2.9000	25.00
33	LVIVESPTK	19	2.8000	24.14
34	LKDVDLYL	99	2.8000	24.14
35	LTLQVAEEL	692	2.8000	24.14
36	YVETVDELV	470	2.7000	23.28
37	LTPGQRDI	492	2.7000	23.28
38	WHLLETLPK	120	2.5200	21.72
39	IAWHLETL	118	2.5000	21.55
40	FMTSTLQQE	306	2.5000	21.55
41	VKALEELGI	522	2.4000	20.69
42	YKSQPWARL	62	2.3000	19.83
43	LLETLPRI	122	2.3000	19.83
44	MADARGMTL	431	2.3000	19.83
45	FAVTGLLEQ	563	2.3000	19.83
46	FDDTHGRPI	646	2.3000	19.83
47	LLRSMDLQT	765	2.3000	19.83
48	LRLSLPRV	780	2.3000	19.83
49	YVAPAPRQY	369	2.2000	18.97
50	MTLSLRITG	437	2.2000	18.97
51	LSLPRVGV	783	2.2000	18.97
52	LYIISPEKR	81	2.1000	18.10
53	LTAVAGRRV	242	2.0000	17.24
54	YENGYITYM	334	1.9000	16.38
55	YIISPEKRS	82	1.8000	15.52
56	MVFHEITEP	135	1.8000	15.52
57	LYGYEVSPV	172	1.7000	14.66
58	WKKVAPKLS	182	1.7000	14.66
59	VPSWVAFAV	557	1.7000	14.66
60	FGRLVDYDF	573	1.7000	14.66
61	VARSGGLKK	618	1.7000	14.66
62	VDPASGEEI	791	1.7000	14.66
63	VSPVLWKKV	177	1.5000	12.93
64	YDFTAAMED	579	1.5000	12.93



65	IDAREVNSI	635	1.5000	12.93
66	FHEITEPAI	137	1.4000	12.07
67	LVTEDQIFT	819	1.4000	12.07
68	YIVESSRGH	39	1.3000	11.21
69	FSATGRTLTL	454	1.3000	11.21
70	LEQHFGRLLV	569	1.3000	11.21
71	LRKGDEVIV	262	1.2000	10.34
72	VTEDQIFTI	820	1.2000	10.34
73	IDLVDAQET	157	1.1000	9.48
74	VHKKGSALV	549	1.1000	9.48
75	VNSIKLFDD	640	1.1000	9.48
76	VRVGKNGPY	656	1.1000	9.48
77	LQTVTLEDA	771	1.1000	9.48
78	VVGVDPASG	788	1.1000	9.48
79	IVESPTKAR	21	1.0200	8.79
80	MSIAQRLYE	327	1.0000	8.62
81	FYFGGDHGV	606	1.0000	8.62
82	FEPLYIISP	78	0.9000	7.76
83	LGIGRPSTY	528	0.9000	7.76
84	WLNNFYFGG	602	0.9000	7.76
85	LWKKVAPKL	181	0.8000	6.90
86	LSAGRVQSV	189	0.8000	6.90
87	IDDFRLYEL	413	0.8000	6.90
88	FPGFLKAYV	463	0.8000	6.90
89	MVIKDGRFG	866	0.8000	6.90
90	LDRLYGYEV	169	0.7000	6.03
91	IVLDEGSAT	269	0.7000	6.03
92	MTSTLQQEA	307	0.6000	5.17
93	WDILAKLDA	218	0.5000	4.31

ALLELE: DRB1_0801	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.6		
Rank	Sequence	At Position	Score	% of Highest Score

1	FRLYELIWQ	416	6.1000	70.93
2	YTRKVKNAQ	377	4.3000	50.00
3	YLERLVAGD	664	4.3000	50.00
4	YGPYLKRGD	806	4.3000	50.00
5	VKKRQKAAG	749	4.0000	46.51
6	MVIKDGRFG	866	3.9000	45.35
7	IWQRTVASQ	422	3.7000	43.02
8	VAGRRVATG	245	3.0000	34.88
9	LSLRITGMS	439	3.0000	34.88
10	FSARLTAVA	238	2.8000	32.56
11	IVARERDRM	202	2.7000	31.40
12	FGPYVTDGE	873	2.7000	31.40
13	YITYMRTDS	338	2.6000	30.23
14	YVHKKGSAL	548	2.6000	30.23
15	VLWKKVAPK	180	2.5000	29.07
16	IVAREGRFG	720	2.4000	27.91
17	VVGVDPASG	788	2.4000	27.91
18	IRDLPRAAS	48	2.3000	26.74
19	WARLGVNVD	67	2.3000	26.74
20	LGTLRKGDE	259	2.3000	26.74
21	MSIAQRLYE	327	2.2000	25.58
22	YVVRVGKNGP	655	2.2000	25.58
23	WHLLETLPK	120	2.1000	24.42
24	LRGLLDVD	95	2.0000	23.26
25	MAFRSAAYW	210	2.0000	23.26
26	WDILAKLDA	218	1.9000	22.09
27	LYGYEVSPV	172	1.8000	20.93
28	WKKVAPKLS	182	1.8000	20.93
29	VHKKGSALV	549	1.6000	18.60
30	LVPSWVFA	556	1.6000	18.60
31	IYVVRVGKNG	654	1.5000	17.44
32	LRLSLPRV	780	1.5000	17.44
33	WVAVTGL	560	1.4000	16.28
34	FGPYVTEIL	727	1.4000	16.28

35	LRSMDLQTV	766	1.4000	16.28
36	YIVESSRGH	39	1.2000	13.95
37	LKPRIPVKR	126	1.1000	12.79
38	YVAPAPRQY	369	1.1000	12.79
39	FPGFLKAYV	463	1.1000	12.79
40	LLSLPRVVG	782	1.1000	12.79
41	VVFSATGRT	452	0.9000	10.47
42	VQSVATRII	194	0.8000	9.30
43	LRITGMSGH	441	0.8000	9.30
44	FAVTGLLEQ	563	0.7000	8.14
45	LVIVESPTK	19	0.6000	6.98
46	IPVKRMVFH	130	0.6000	6.98
47	VNSIKLFDD	640	0.6000	6.98
48	VAPKLSAGR	185	0.5000	5.81
49	VKNAQEAHE	381	0.5000	5.81
50	ILDRLYGYE	168	0.4000	4.65
51	FMTSTLQQE	306	0.4000	4.65
52	YSSIIKTIQ	536	0.4000	4.65
53	YARRPYPPF	298	0.3000	3.49
54	WQRTVASQM	423	0.3000	3.49
55	ITGMSGHQE	443	0.3000	3.49
56	LLADRRARG	903	0.3000	3.49
57	VGKNGPYLE	658	0.2000	2.33
58	LKIYAEPKR	834	0.2000	2.33
59	FEPLYIISP	78	0.1000	1.16
60	YIISPEKRS	82	0.1000	1.16
61	YELIWQRTV	419	0.1000	1.16
62	VAFVTGLL	561	0.1000	1.16
63	VGINLEGID	628	0.1000	1.16
64	VPAKYKSQP	58	-0.1000	0
65	VATRIIVAR	197	-0.1000	0
66	LNNFYFGGD	603	-0.1000	0
67	IYAEPKRRG	836	-0.1000	0
68	VKRMVFHEI	132	-0.2000	0

69	YPPFMTSTL	303	-0.2000	0
70	IDAREVNSI	635	-0.2000	0
71	VPAKKAAGR	924	-0.2000	0
72	IISPEKRST	83	-0.3000	0
73	FRSAAYWDI	212	-0.3000	0
74	LRFSAERTM	319	-0.3000	0
75	VRVGKNGPY	656	-0.3000	0
76	LERLVAGDT	665	-0.3000	0
77	IGRPSTYSS	530	-0.4000	0
78	LASYLGSGY	31	-0.5000	0
79	YEVSPVLWK	175	-0.5000	0
80	ILAKLDASV	220	-0.5000	0
81	LIWQRTVAS	421	-0.5000	0
82	MTLSLRITG	437	-0.5000	0
83	LKAYVETVD	467	-0.5000	0
84	WLNNFYFGG	602	-0.5000	0
85	LVAGDTGEP	668	-0.5000	0
86	VIVLDEGSA	268	-0.6000	0
87	YGDEYVAPA	365	-0.6000	0
88	FLKAYVETV	466	-0.6000	0
89	YLGSGYIVE	34	-0.7000	0
90	IVESSRghi	40	-0.7000	0

ALLELE: DRB1_0802	Threshold for 3 % with score: 1.0	Highest Score achievable by any peptide: 8
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Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	5.3000	66.25
2	YTRKVKNAQ	377	3.5000	43.75
3	VLWKKVAPK	180	3.2000	40.00
4	LSLRITGMS	439	3.0000	37.50
5	IWQRTVASQ	422	2.9000	36.25
6	FSARLTAVA	238	2.8000	35.00
7	VKKRQKAAG	749	2.7000	33.75

8	YITYMRTDS	338	2.6000	32.50
9	MVIKDGRFG	866	2.6000	32.50
10	IRDLPRAAS	48	2.3000	28.75
11	YGPYLKRG	806	2.3000	28.75
12	WDILAKLDA	218	1.9000	23.75
13	WKKVAPKLS	182	1.8000	22.50
14	YVRVGKNGP	655	1.8000	22.50
15	WHLLETLPK	120	1.7000	21.25
16	VAGRRVATG	245	1.7000	21.25
17	IVARERDRM	202	1.6000	20.00
18	YVHKKGSAL	548	1.6000	20.00
19	LVPSWVAFA	556	1.6000	20.00
20	YLERLVAGD	664	1.6000	20.00
21	LYGYEVSPV	172	1.5000	18.75
22	LVIVESPTK	19	1.3000	16.25
23	VHKKGSALV	549	1.3000	16.25
24	LRLLSLPRV	780	1.2000	15.00
25	LKPRIPVKR	126	1.1000	13.75
26	MAFRSAAYW	210	1.1000	13.75
27	IVAREGRFG	720	1.1000	13.75
28	LRSMDLQTV	766	1.1000	13.75
29	VVGVDPASG	788	1.1000	13.75
30	FPGFLKAYV	463	0.8000	10.00
31	VQSVATRII	194	0.6000	7.50
32	VAPKLSAGR	185	0.5000	6.25
33	WVAFAVTGL	560	0.4000	5.00
34	FGPYVTEIL	727	0.4000	5.00
35	YEVSPVLWK	175	0.2000	2.50
36	IYVRVGKNG	654	0.2000	2.50
37	LKIYAEPKR	834	0.2000	2.50
38	YIISPEKRS	82	0.1000	1.25
39	YIVESSRGH	39	-0.0200	0
40	VATRIIVAR	197	-0.1000	0
41	FAVTGLLEQ	563	-0.1000	0

42	FDSLGLTRK	256	-0.2000	0
43	YELIWQRTV	419	-0.2000	0
44	LLSLPRVVG	782	-0.2000	0
45	VPAKKAAGR	924	-0.2000	0
46	FEPLYIISP	78	-0.3000	0
47	FGPYVTDGE	873	-0.3000	0
48	WARLGVNVD	67	-0.4000	0
49	VKRMVFHEI	132	-0.4000	0
50	IGRPSTYSS	530	-0.4000	0
51	YSSIIKTIQ	536	-0.4000	0
52	IDAREVNSI	635	-0.4000	0
53	LRITGMSGH	441	-0.4200	0
54	VPAKYKSQP	58	-0.5000	0
55	FRSAAYWDI	212	-0.5000	0
56	LIWQRTVAS	421	-0.5000	0
57	VIVLDEGSA	268	-0.6000	0
58	YARRPYPPF	298	-0.6000	0
59	YGDEYVAPA	365	-0.6000	0
60	IPVKRMVFH	130	-0.6200	0
61	VESPTKARK	22	-0.7000	0
62	LRGLLDVD	95	-0.7000	0
63	LGTLRKGDE	259	-0.7000	0
64	MRTDSTTLS	342	-0.7000	0
65	ILPEPAADA	734	-0.7000	0
66	YLKRGNSR	809	-0.7000	0
67	ILAKLDASV	220	-0.8000	0
68	MSIAQRLYE	327	-0.8000	0
69	WQRTVASQM	423	-0.8000	0
70	LEDALRLLS	776	-0.8000	0
71	IVESSRGI	40	-0.9000	0
72	LAKLDASVS	221	-0.9000	0
73	FLKAYVETV	466	-0.9000	0
74	VAFAVTGLL	561	-0.9000	0
75	LVGINLEGI	627	-0.9000	0

76	LVAGDTGEP	668	-0.9000	0
77	LRELGTDP	853	-0.9000	0
78	LGSGYIVES	35	-1.0000	0
79	LWKKVAPKL	181	-1.0000	0
80	LQVAEELFA	694	-1.0000	0
81	LLADRRARG	903	-1.0000	0
82	FSAERTMSI	321	-1.1000	0
83	LYIISPEKR	81	-1.2000	0
84	IISPEKRST	83	-1.2000	0
85	YPPFMTSTL	303	-1.2000	0
86	VKALEELGI	522	-1.2000	0
87	LERLVAGDT	665	-1.2000	0
88	YVTEILPEP	730	-1.2000	0
89	IVELTPDGH	500	-1.2200	0
90	LTPGQRLDI	492	-1.3000	0

ALLELE: DRB1_0804	Threshold for 3 % with score: 1.6	Highest Score achievable by any peptide: 8
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Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	4.3000	53.75
2	VLWKKVAPK	180	4.2000	52.50
3	LSLRITGMS	439	4.0000	50.00
4	IWQRTVASQ	422	3.9000	48.75
5	VKKRQKAAG	749	3.7000	46.25
6	MVIKDGRFG	866	3.6000	45.00
7	IRDLPRAAS	48	3.3000	41.25
8	VAGRRVATG	245	2.7000	33.75
9	IVARERDRM	202	2.6000	32.50
10	LVPSWVAFA	556	2.6000	32.50
11	LYGYEVSPV	172	2.5000	31.25
12	YTRKVKNAQ	377	2.5000	31.25
13	LVIVESPTK	19	2.3000	28.75
14	VHKKGSALV	549	2.3000	28.75

15	LRLSLPRV	780	2.2000	27.50
16	LKPRIPVKR	126	2.1000	26.25
17	MAFRSAAYW	210	2.1000	26.25
18	IVAREGRFG	720	2.1000	26.25
19	LRSMDLQTV	766	2.1000	26.25
20	VVGVDPASG	788	2.1000	26.25
21	FSARLTAVA	238	1.8000	22.50
22	VQSVATRII	194	1.6000	20.00
23	YITYMRTDS	338	1.6000	20.00
24	VAPKLSAGR	185	1.5000	18.75
25	YGPYLKRGV	806	1.3000	16.25
26	IYVRVGKNG	654	1.2000	15.00
27	LKIYAEPKR	834	1.2000	15.00
28	VVFSATGRT	452	1.0000	12.50
29	VATRIIVAR	197	0.9000	11.25
30	WDILAKLDA	218	0.9000	11.25
31	WKKVAPKLS	182	0.8000	10.00
32	YVRVGKNGP	655	0.8000	10.00
33	LLSLPRVVG	782	0.8000	10.00
34	VPAKKAAGR	924	0.8000	10.00
35	WHLLETLPK	120	0.7000	8.75
36	VKRMVFHEI	132	0.6000	7.50
37	IGRPSTYSS	530	0.6000	7.50
38	YVHKKGSAL	548	0.6000	7.50
39	IDAREVNSI	635	0.6000	7.50
40	YLERLVAGD	664	0.6000	7.50
41	LRITGMSGH	441	0.5800	7.25
42	VPAKYKSQP	58	0.5000	6.25
43	LIWQRTVAS	421	0.5000	6.25
44	VIVLDEGSA	268	0.4000	5.00
45	IPVKRMVFH	130	0.3800	4.75
46	VESPTKARK	22	0.3000	3.75
47	LRGLLDVD	95	0.3000	3.75
48	LGTLRKGDE	259	0.3000	3.75



49	MRTDSTTLS	342	0.3000	3.75
50	ILPEPAADA	734	0.3000	3.75
51	ILAKLDASV	220	0.2000	2.50
52	MSIAQRLYE	327	0.2000	2.50
53	LEDALRLLS	776	0.2000	2.50
54	IVESSRGHI	40	0.1000	1.25
55	LAKLDASVS	221	0.1000	1.25
56	VAFAVTGLL	561	0.1000	1.25
57	LVGINLEGI	627	0.1000	1.25
58	LVAGDTGEP	668	0.1000	1.25
59	LRELGTDPA	853	0.1000	1.25
60	LYIISPEKR	81	-0.2000	0
61	IISPEKRST	83	-0.2000	0
62	FPGFLKAYV	463	-0.2000	0
63	VKALEELGI	522	-0.2000	0
64	LERLVAGDT	665	-0.2000	0
65	IVELTPDGH	500	-0.2200	0
66	LTPGQRDI	492	-0.3000	0
67	LRFSAERTM	319	-0.4000	0
68	VRVGKNGPY	656	-0.4000	0
69	IYAEPKRRG	836	-0.4000	0
70	LASYLGSGY	31	-0.6000	0
71	LETLKPRIP	123	-0.6000	0
72	ITYMRTDST	339	-0.6000	0
73	INAARTQAR	354	-0.6000	0
74	LPHLTPGQR	489	-0.6000	0
75	IQDRGYVHK	543	-0.6000	0
76	WVAFAVTGL	560	-0.6000	0
77	FGPYVTEIL	727	-0.6000	0
78	ITLDEALKI	828	-0.6000	0
79	LKKLVGINL	624	-0.7000	0
80	LEGIDAREV	632	-0.7000	0
81	LQTVTLEDA	771	-0.7000	0
82	YEVSPVLWK	175	-0.8000	0

83	MTLSLRITG	437	-0.8000	0
84	LGIGRPSTY	528	-0.8000	0
85	LVDYDFTAA	576	-0.8000	0
86	YIISPEKRS	82	-0.9000	0
87	LSLPRVVG	783	-0.9000	0
88	LADRRARGP	904	-0.9000	0

ALLELE: DRB1_0806	Threshold for 3 % with score: 2.4	Highest Score achievable by any peptide: 8.6
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Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	5.1000	59.30
2	VKKRQKAAG	749	5.0000	58.14
3	MVIKDGRFG	866	4.9000	56.98
4	IWQRTVASQ	422	4.7000	54.65
5	VAGRRVATG	245	4.0000	46.51
6	LSLRITGMS	439	4.0000	46.51
7	IVARERDRM	202	3.7000	43.02
8	VLWKKVAPK	180	3.5000	40.70
9	IVAREGRFG	720	3.4000	39.53
10	VVGVDPASG	788	3.4000	39.53
11	IRDLPRAAS	48	3.3000	38.37
12	LGTLRKGDE	259	3.3000	38.37
13	YTRKVKNAQ	377	3.3000	38.37
14	YLERLVAGD	664	3.3000	38.37
15	YGPYLKRG	806	3.3000	38.37
16	MSIAQRLYE	327	3.2000	37.21
17	LRGLLDVD	95	3.0000	34.88
18	MAFRSAAYW	210	3.0000	34.88
19	LYGYEVSPV	172	2.8000	32.56
20	VHKKGSALV	549	2.6000	30.23
21	LVPSWVFA	556	2.6000	30.23
22	IYVRVGKNG	654	2.5000	29.07
23	LRLSLPRV	780	2.5000	29.07

24	LRSMDLQTV	766	2.4000	27.91
25	LKPRIPVKR	126	2.1000	24.42
26	LLSLPRVVG	782	2.1000	24.42
27	VVFSATGRT	452	1.9000	22.09
28	VQSVATRII	194	1.8000	20.93
29	FSARLTAVA	238	1.8000	20.93
30	LRITGMSGH	441	1.8000	20.93
31	FGPYVTDGE	873	1.7000	19.77
32	LVIVESPTK	19	1.6000	18.60
33	IPVKRMVFH	130	1.6000	18.60
34	YITYMRTDS	338	1.6000	18.60
35	YVHKKGSAL	548	1.6000	18.60
36	VNSIKLFDD	640	1.6000	18.60
37	VAPKLSAGR	185	1.5000	17.44
38	VKNAQEAHE	381	1.5000	17.44
39	ILDRLYGYE	168	1.4000	16.28
40	WARLGVNVD	67	1.3000	15.12
41	ITGMSGHQE	443	1.3000	15.12
42	LLADRRARG	903	1.3000	15.12
43	YVRVGKNGP	655	1.2000	13.95
44	VGKNGPYLE	658	1.2000	13.95
45	LKIYAEPKR	834	1.2000	13.95
46	WHLLETLPK	120	1.1000	12.79
47	VAFVAVTGLL	561	1.1000	12.79
48	VGINLEGID	628	1.1000	12.79
49	LWKKVAPKL	181	1.0000	11.63
50	IVELTPDGH	500	1.0000	11.63
51	VPAKYKSQP	58	0.9000	10.47
52	VATRIIVAR	197	0.9000	10.47
53	WDILAKLDA	218	0.9000	10.47
54	LNNFYFGGD	603	0.9000	10.47
55	IYAEPKRRG	836	0.9000	10.47
56	VKRMVFHEI	132	0.8000	9.30
57	WKKVAPKLS	182	0.8000	9.30

58	IDAREVNSI	635	0.8000	9.30
59	VPAKKAAGR	924	0.8000	9.30
60	IISPEKRST	83	0.7000	8.14
61	LRFSAERTM	319	0.7000	8.14
62	VRVGKNGPY	656	0.7000	8.14
63	LERLVAGDT	665	0.7000	8.14
64	IGRPSTYSS	530	0.6000	6.98
65	LASYLGSGY	31	0.5000	5.81
66	ILAKLDASV	220	0.5000	5.81
67	LIWQRTVAS	421	0.5000	5.81
68	MTLSLRITG	437	0.5000	5.81
69	LKAYVETVD	467	0.5000	5.81
70	LVAGDTGEP	668	0.5000	5.81
71	VIVLDEGSA	268	0.4000	4.65
72	WVAFAVTGL	560	0.4000	4.65
73	FGPYVTEIL	727	0.4000	4.65
74	IVESSRGIH	40	0.3000	3.49
75	ITYMRTDST	339	0.3000	3.49
76	MRTDSTTLS	342	0.3000	3.49
77	LGIGRPSTY	528	0.3000	3.49
78	LKKLVGINL	624	0.3000	3.49
79	LVGINLEGI	627	0.3000	3.49
80	ILPEPAADA	734	0.3000	3.49
81	YIVESSRGIH	39	0.2000	2.33
82	LEDALRLLS	776	0.2000	2.33
83	LAKLDASVS	221	0.1000	1.16
84	YVAPAPRQY	369	0.1000	1.16
85	FPGFLKAYV	463	0.1000	1.16
86	LRELGTDPA	853	0.1000	1.16
87	LTPGQRLLI	492	-0.1000	0

ALLELE: DRB1_0813	Threshold for 3 % with score: 1.9	Highest Score achievable by any peptide: 8.7
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Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	6.1800	71.03
2	YTRKVKNAQ	377	5.5000	63.22
3	YITYMRTDS	338	5.4000	62.07
4	YVRVGKNGP	655	3.8000	43.68
5	YVHKKGSAL	548	3.4000	39.08
6	LYGYEVPV	172	3.3000	37.93
7	VLWKKVAPK	180	3.2000	36.78
8	WVAFAVTGL	560	3.2000	36.78
9	IWQRTVASQ	422	2.9000	33.33
10	IVARERDRM	202	2.8000	32.18
11	FSARLTAVA	238	2.8000	32.18
12	VKKRQKAAG	749	2.7000	31.03
13	WDILAKLDA	218	2.5000	28.74
14	YSSIIKTIQ	536	2.4000	27.59
15	IRDLPRAAS	48	2.3000	26.44
16	WHLLETLKP	120	2.3000	26.44
17	LSLRITGMS	439	2.3000	26.44
18	MVIKDGRFG	866	2.3000	26.44
19	LKPRIPVKR	126	2.1000	24.14
20	MRTDSTTLS	342	2.1000	24.14
21	FGPYVTEIL	727	2.1000	24.14
22	LRSMDLQTV	766	2.1000	24.14
23	YGPYLKRGN	806	2.0000	22.99
24	VAGRRVATG	245	1.7000	19.54
25	WARLGVNVD	67	1.6000	18.39
26	LVPSWVAFA	556	1.6000	18.39
27	IDAREVNSI	635	1.6000	18.39
28	YLERLVAGD	664	1.6000	18.39
29	LVIVESPTK	19	1.5000	17.24
30	LRLLSLPRV	780	1.4000	16.09
31	LRITGMSGH	441	1.3800	15.86
32	VPAKYKSQP	58	1.3000	14.94
33	WKKVAPKLS	182	1.3000	14.94

34	VHKKGSALV	549	1.3000	14.94
35	MAFRSAAYW	210	1.1000	12.64
36	VVGVDPASG	788	1.1000	12.64
37	WQRTVASQM	423	1.0000	11.49
38	LVDYDFATA	576	1.0000	11.49
39	VATRIIVAR	197	0.9000	10.34
40	LAKLDASVS	221	0.9000	10.34
41	FGPYVTDGE	873	0.9000	10.34
42	YEVSPVLWK	175	0.8000	9.20
43	FPGFLKAYV	463	0.8000	9.20
44	FLKAYVETV	466	0.8000	9.20
45	LVGINLEGI	627	0.8000	9.20
46	IVAREGRFG	720	0.8000	9.20
47	LLSLPRVVG	782	0.8000	9.20
48	MVFHEITEP	135	0.7000	8.05
49	YPPFMTSTL	303	0.6000	6.90
50	FEPLYIISP	78	0.5800	6.67
51	VIVESPTKA	20	0.5000	5.75
52	LYIISPEKR	81	0.5000	5.75
53	LRGLLDVD	95	0.5000	5.75
54	VAPKLSAGR	185	0.5000	5.75
55	IRPAGETFA	391	0.5000	5.75
56	LIWQRTVAS	421	0.5000	5.75
57	IGRPSTYSS	530	0.5000	5.75
58	FAVTGLLEQ	563	0.5000	5.75
59	YLKRGNSDR	809	0.5000	5.75
60	FDSLGLTRK	256	0.4000	4.60
61	LKIYAEPKR	834	0.4000	4.60
62	IPVKRMVFH	130	0.3800	4.37
63	VQSVATRII	194	0.3000	3.45
64	YENGYITYM	334	0.3000	3.45
65	LRELGTDPA	853	0.3000	3.45
66	LASYLGSGY	31	0.2000	2.30
67	VKRMVFHEI	132	0.1000	1.15

68	YMRTDSTTL	341	0.1000	1.15
69	YVTDGETNA	876	0.1000	1.15
70	IVELTPDGH	500	-0.0200	0
71	FSAERTMSI	321	-0.1000	0
72	MSIAQRLYE	327	-0.2000	0
73	LEDALRLLS	776	-0.2000	0
74	VPAKKAAGR	924	-0.2000	0
75	IVLDEGSAT	269	-0.3000	0
76	YVAPAPRQY	369	-0.3000	0
77	IYVRVGKNG	654	-0.3000	0
78	YIVESSRGH	39	-0.3200	0
79	YIISPEKRS	82	-0.4000	0
80	YARRPYPPF	298	-0.4000	0
81	ITYMRTDST	339	-0.4000	0
82	LKAYVETVD	467	-0.4000	0
83	LQVAEELFA	694	-0.4000	0
84	YELIWQRTV	419	-0.5000	0
85	INAARTQAR	354	-0.6000	0
86	YGDEYVAPA	365	-0.6000	0
87	VKALEELGI	522	-0.6000	0
88	IQDRGYVHK	543	-0.6000	0

ALLELE: DRB1_0817	Threshold for 3 % with score: 2.8	Highest Score achievable by any peptide: 10.1
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Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	7.7000	76.24
2	YTRKVKNAQ	377	4.6000	45.54
3	YGPYLKRGN	806	4.5000	44.55
4	YLERLVAGD	664	4.3000	42.57
5	MVIKDGRFG	866	4.1000	40.59
6	MSIAQRLYE	327	4.0000	39.60
7	VKKRQKAAG	749	4.0000	39.60
8	WHLLETLPK	120	3.9000	38.61

9	WDILAKLDA	218	3.7000	36.63
10	YITYMRTDS	338	3.7000	36.63
11	IWQRTVASQ	422	3.7000	36.63
12	LSLRITGMS	439	3.1000	30.69
13	VAGRRVATG	245	3.0000	29.70
14	FSARLTAVA	238	2.8000	27.72
15	LRLSLPRV	780	2.6500	26.24
16	WARLGVNVD	67	2.6000	25.74
17	YVHKKGSAL	548	2.6000	25.74
18	IVAREGRFG	720	2.6000	25.74
19	VLWKKVAPK	180	2.5000	24.75
20	WVFAVTGL	560	2.5000	24.75
21	FAVTGLLEQ	563	2.5000	24.75
22	YVRVGKNGP	655	2.5000	24.75
23	FGPYVTEIL	727	2.5000	24.75
24	WKKVAPKLS	182	2.4000	23.76
25	IVARERDRM	202	2.4000	23.76
26	LGTLRKGDE	259	2.4000	23.76
27	VVGVDPASG	788	2.4000	23.76
28	FGPYVTDGE	873	2.4000	23.76
29	IRDLPRAAS	48	2.3000	22.77
30	IYVRVGKNG	654	2.1000	20.79
31	MAFRSAAYW	210	2.0000	19.80
32	LYGYEVSPV	172	1.8000	17.82
33	LVIVESPTK	19	1.7500	17.33
34	FEPLYIISP	78	1.7000	16.83
35	LRGLLKDVD	95	1.7000	16.83
36	LKPRIPVKR	126	1.6000	15.84
37	VHKKGSALV	549	1.6000	15.84
38	LVPSWVafa	556	1.6000	15.84
39	LLSLPRVVG	782	1.6000	15.84
40	YSSIIKTIQ	536	1.5000	14.85
41	LRSMDLQTV	766	1.5000	14.85
42	YARRPYPPF	298	1.4500	14.36



43	YIVESSRGH	39	1.4000	13.86
44	LKIYAEPKR	834	1.3500	13.37
45	YEVSPVLWK	175	1.3000	12.87
46	YVAPAPRQY	369	1.3000	12.87
47	LWKKVAPKL	181	1.1500	11.39
48	IPVKRMVFH	130	1.1000	10.89
49	MTLSLRITG	437	1.1000	10.89
50	FPGFLKAYV	463	1.1000	10.89
51	VNSIKLFDD	640	1.1000	10.89
52	VQSVATRII	194	1.0000	9.90
53	ITGMSGHQE	443	1.0000	9.90
54	VVFSATGRT	452	1.0000	9.90
55	LEDALRLLS	776	1.0000	9.90
56	YLGSGYIVE	34	0.9000	8.91
57	FDSLGTLRK	256	0.9000	8.91
58	LKKLVGINL	624	0.9000	8.91
59	VGKNGPYLE	658	0.9000	8.91
60	LRITGMSGH	441	0.8000	7.92
61	VKALEELGI	522	0.8000	7.92
62	YDFTAAMED	579	0.8000	7.92
63	LQVAEELFA	694	0.8000	7.92
64	YIISPEKRS	82	0.7000	6.93
65	FSAERTMSI	321	0.7000	6.93
66	LTPGQRLDI	492	0.7000	6.93
67	LKAYVETVD	467	0.6000	5.94
68	VKRMVFHEI	132	0.5000	4.95
69	ILDRLYGYE	168	0.5000	4.95
70	VAPKLSAGR	185	0.5000	4.95
71	FRSAAYWDI	212	0.5000	4.95
72	FMTSTLQQE	306	0.5000	4.95
73	VKNAQEAHE	381	0.5000	4.95
74	FLKAYVETV	466	0.5000	4.95
75	VTLEDALRL	774	0.5000	4.95
76	VATRIIVAR	197	0.4000	3.96

77	MRTDSTTLS	342	0.4000	3.96
78	LVGINLEGI	627	0.4000	3.96
79	ITLDEALKI	828	0.4000	3.96
80	YVTEILPEP	730	0.3500	3.47
81	YELIWQRTV	419	0.3000	2.97
82	WQRTVASQM	423	0.3000	2.97
83	IGRPSTYSS	530	0.3000	2.97
84	LVTEDQIFT	819	0.3000	2.97
85	LLADRRARG	903	0.3000	2.97
86	VAFVAVTGLL	561	0.2000	1.98
87	VGINLEGID	628	0.2000	1.98
88	YGYEVSPVL	173	0.1500	1.49
89	IDAREVNSI	635	0.1000	0.99
90	IYAEPKRRG	836	0.1000	0.99

ALLELE: DRB1_1101	Threshold for 3 % with score: 1.1	Highest Score achievable by any peptide: 8.3
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Rank	Sequence	At Position	Score	% of Highest Score
1	WDILAKLDA	218	4.1000	49.40
2	FRLYELIWQ	416	4.0000	48.19
3	WHLLETLPK	120	3.9000	46.99
4	LRLLSLPRV	780	2.7500	33.13
5	IRDLPRAAS	48	2.7000	32.53
6	LVIVESPTK	19	2.5500	30.72
7	WKKVAPKLS	182	2.5000	30.12
8	YEVSPVLWK	175	2.3000	27.71
9	YVRVGKNGP	655	2.2000	26.51
10	FAVTGLLEQ	563	2.1000	25.30
11	FDSLGTLRK	256	2.0000	24.10
12	LVPSWVAFA	556	1.9000	22.89
13	FEPLYIISP	78	1.7000	20.48
14	WVAFVAVTGL	560	1.4000	16.87
15	YSSIIKTIQ	536	1.3000	15.66

16	VVGVDPASG	788	1.2000	14.46
17	YIISPEKRS	82	1.0000	12.05
18	MSIAQRLYE	327	1.0000	12.05
19	YTRKVKNAQ	377	1.0000	12.05
20	VKALEELGI	522	1.0000	12.05
21	LEDALRLLS	776	1.0000	12.05
22	VQSVATRII	194	0.9000	10.84
23	YITYMRTDS	338	0.8000	9.64
24	LVGINLEGI	627	0.8000	9.64
25	LQVAEELFA	694	0.8000	9.64
26	LRSMDLQTV	766	0.8000	9.64
27	FPGFLKAYV	463	0.7000	8.43
28	LLSLPRVVG	782	0.7000	8.43
29	YELIWQRTV	419	0.6000	7.23
30	LIWQRTVAS	421	0.6000	7.23
31	LYIISPEKR	81	0.5000	6.02
32	VLWKKVAPK	180	0.4000	4.82
33	VVFSATGRT	452	0.4000	4.82
34	WARLGVNVD	67	0.3000	3.61
35	FRSAAYWDI	212	0.3000	3.61
36	LKKLVGINL	624	0.3000	3.61
37	FLKAYVETV	466	0.2000	2.41
38	MTLSLRITG	437	0.1000	1.20
39	LSLRITGMS	439	0.1000	1.20
40	LRITGMSGH	441	-0.0200	0
41	VKRMVFHEI	132	-0.1000	0
42	VIVLDEGSA	268	-0.1000	0
43	IWQRTVASQ	422	-0.1000	0
44	FSARLTAVA	238	-0.2000	0
45	LGTLRKGDE	259	-0.2000	0
46	FSAERTMSI	321	-0.2000	0
47	LTPGQRLDI	492	-0.2000	0
48	MRTDSTTLS	342	-0.3000	0
49	VKKRQKAAG	749	-0.3000	0

50	WQRTVASQM	423	-0.4000	0
51	IGRPSTYSS	530	-0.4000	0
52	YGPYLKRGN	806	-0.4000	0
53	IVESSRGI	40	-0.5000	0
54	LAKLDASVS	221	-0.5000	0
55	YVAPAPRQY	369	-0.5000	0
56	VARSGLKK	618	-0.5000	0
57	LQVTLEDA	771	-0.5000	0
58	ITLDEALKI	828	-0.5000	0
59	YIVESSRGI	39	-0.5200	0
60	LRGLLDVD	95	-0.6000	0
61	MVFHEITEP	135	-0.6000	0
62	LERLVAGDT	665	-0.7000	0
63	YVTEILPEP	730	-0.7500	0
64	VAFVTGLL	561	-0.8000	0
65	LRELGTDPA	853	-0.8000	0
66	LLETLPRI	122	-0.8500	0
67	VSELRGLL	92	-0.9000	0
68	LRFSAERTM	319	-0.9000	0
69	LEGIDAREV	632	-0.9000	0
70	LETLPRI	123	-1.0000	0
71	VNSIKLFDD	640	-1.0000	0
72	LPHLTPGQR	489	-1.1000	0
73	IVELTPDGH	500	-1.1200	0
74	IVESPTKAR	21	-1.2000	0
75	LGSGYIVES	35	-1.2000	0
76	YMRTDSTTL	341	-1.2000	0
77	IRPAGETFA	391	-1.2000	0
78	YVHKKGSAL	548	-1.2000	0
79	VTLEDALRL	774	-1.2000	0
80	FHEITEPAI	137	-1.2500	0
81	VAGRRVATG	245	-1.3000	0
82	YPPFMTSTL	303	-1.3000	0
83	YGDEYVAPA	365	-1.3000	0

84	WLNNFYFGG	602	-1.3000	0
85	LVTEDQIFT	819	-1.3000	0
86	VESPTKARK	22	-1.4000	0
87	LKPRIPVKR	126	-1.4000	0
88	IRAAAEHPR	145	-1.4000	0
89	LYGYEVSPV	172	-1.4000	0
90	VETVDELVG	471	-1.4000	0
91	YLERLVAGD	664	-1.4000	0

Rank	Sequence	At Position	Score	% of Highest Score
ALLELE: DRB1_1102		Threshold for 3 % with score: 1.8		Highest Score achievable by any peptide: 8.4
1	MVIKDGRFG	866	3.9000	46.43
2	LIWQRTVAS	421	3.1000	36.90
3	IRDLPRAAS	48	3.0000	35.71
4	LVPSWVAFA	556	3.0000	35.71
5	MVFHEITEP	135	2.9000	34.52
6	FRLYELIWQ	416	2.8000	33.33
7	VLWKKVAPK	180	2.7000	32.14
8	LRLLSLPRV	780	2.6000	30.95
9	YTRKVKNAQ	377	2.4000	28.57
10	LRSMDLQTV	766	2.3000	27.38
11	VQSVATRII	194	2.2000	26.19
12	LVIVESPTK	19	1.8000	21.43
13	LRFSAERTM	319	1.8000	21.43
14	IWQRTVASQ	422	1.8000	21.43
15	IVAREGRFG	720	1.8000	21.43
16	VKKRQKAAG	749	1.6000	19.05
17	LLSLPRVVG	782	1.5000	17.86
18	IVARERDRM	202	1.4000	16.67
19	MRTDSTTLS	342	1.4000	16.67
20	LEQHFGRLV	569	1.4000	16.67
21	WDILAKLDA	218	1.3000	15.48

22	YITYMRTDS	338	1.3000	15.48
23	YGPYLKRGN	806	1.3000	15.48
24	IYAEPKRRG	836	1.3000	15.48
25	VKRMVFHEI	132	1.2000	14.29
26	WVAFAVTGL	560	1.2000	14.29
27	IISPEKRST	83	1.1000	13.10
28	WHLLETLKP	120	1.1000	13.10
29	LYGYEVSPV	172	1.1000	13.10
30	LKPRIPVKR	126	1.0000	11.90
31	VDAQETRRI	160	1.0000	11.90
32	IGRPSTYSS	530	1.0000	11.90
33	YVRVGKNGP	655	1.0000	11.90
34	LRGLLDVD	95	0.9000	10.71
35	LETLKPRIP	123	0.9000	10.71
36	MSIAQRLYE	327	0.9000	10.71
37	LSLRITGMS	439	0.9000	10.71
38	LEDALRLLS	776	0.9000	10.71
39	VVGVDPASG	788	0.9000	10.71
40	LRITGMSGH	441	0.8800	10.48
41	VHKKGSALV	549	0.8000	9.52
42	LQVAEELFA	694	0.7000	8.33
43	LRELGTDP	853	0.7000	8.33
44	YIVESSRGH	39	0.6800	8.10
45	VAGRRVATG	245	0.6000	7.14
46	LVGINLEGI	627	0.6000	7.14
47	LGSGYIVES	35	0.5000	5.95
48	VFSATGRTL	453	0.5000	5.95
49	WKKVAPKLS	182	0.4000	4.76
50	IIVARERDR	201	0.4000	4.76
51	VVFSATGRT	452	0.4000	4.76
52	IVELTPDGH	500	0.3800	4.52
53	LYIISPEKR	81	0.3000	3.57
54	YIISPEKRS	82	0.3000	3.57
55	YEVSPVLWK	175	0.3000	3.57

56	YVAPAPRQY	369	0.3000	3.57
57	VPSWVAFV	557	0.3000	3.57
58	LAKLDASVS	221	0.2000	2.38
59	LQQEASRKL	311	0.2000	2.38
60	INAARTQAR	354	0.2000	2.38
61	IRPAGETFA	391	0.2000	2.38
62	VKALEELGI	522	0.2000	2.38
63	LEGIDAREV	632	0.2000	2.38
64	ILPEPAADA	734	0.2000	2.38
65	VIVESPTKA	20	0.1000	1.19
66	IVESPTKAR	21	0.1000	1.19
67	IRAAAEHPR	145	0.1000	1.19
68	FRSAAYWDI	212	0.1000	1.19
69	FPGFLKAYV	463	0.1000	1.19
70	ITAQNGRYG	799	0.1000	1.19
71	LKIYAEPKR	834	0.1000	1.19
72	MTLSLRITG	437	-0.1000	0
73	LTPGQRDI	492	-0.1000	0
74	IDAREVNSI	635	-0.1000	0
75	IYVRVGKNG	654	-0.1000	0
76	VAREGRFGP	721	-0.1000	0
77	IPVKRMVFH	130	-0.1200	0
78	VESPTKARK	22	-0.2000	0
79	VATRIIVAR	197	-0.2000	0
80	WARLGVNVD	67	-0.3000	0
81	IAWHLETL	118	-0.3000	0
82	VFHEITEPA	136	-0.3000	0
83	FSARLTAVA	238	-0.3000	0
84	ITYMRTDST	339	-0.3000	0
85	VAPAPRQYT	370	-0.3000	0
86	YELIWQRTV	419	-0.3000	0
87	ITLDEALKI	828	-0.3000	0
88	LTLQVAEEL	692	-0.4000	0
89	LSLPRVGV	783	-0.4000	0

ALLELE: DRB1_1104	Threshold for 3 % with score: 2.0	Highest Score achievable by any peptide: 8.3
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Rank	Sequence	At Position	Score	% of Highest Score
1	LRLSLPRV	780	3.7500	45.18
2	IRDLPRAAS	48	3.7000	44.58
3	LVIVESPTK	19	3.5500	42.77
4	WDILAKLDA	218	3.1000	37.35
5	FRLYELIWQ	416	3.0000	36.14
6	WHLLETLPK	120	2.9000	34.94
7	LVPSWVAFA	556	2.9000	34.94
8	VVGVDPASG	788	2.2000	26.51
9	MSIAQRLYE	327	2.0000	24.10
10	VKALEELGI	522	2.0000	24.10
11	LEDALRLLS	776	2.0000	24.10
12	VQSVATRII	194	1.9000	22.89
13	LVGINLEGI	627	1.8000	21.69
14	LQVAEELFA	694	1.8000	21.69
15	LRSMDLQTV	766	1.8000	21.69
16	LLSLPRVVG	782	1.7000	20.48
17	LIWQRTVAS	421	1.6000	19.28
18	LYIISPEKR	81	1.5000	18.07
19	WKKVAPKLS	182	1.5000	18.07
20	VLWKKVAPK	180	1.4000	16.87
21	VVFSATGRT	452	1.4000	16.87
22	YEVSPVLWK	175	1.3000	15.66
23	LKKLVGINL	624	1.3000	15.66
24	YVRVGKNGP	655	1.2000	14.46
25	MTLSLRITG	437	1.1000	13.25
26	LSLRITGMS	439	1.1000	13.25
27	FAVTGLLEQ	563	1.1000	13.25
28	FDSLGLTRK	256	1.0000	12.05
29	MVIKDGRFG	866	1.0000	12.05
30	LRITGMSGH	441	0.9800	11.81



31	VKRMVFHEI	132	0.9000	10.84
32	VIVLDEGSA	268	0.9000	10.84
33	IWQRTVASQ	422	0.9000	10.84
34	LGTLRKGDE	259	0.8000	9.64
35	LTPGQRDI	492	0.8000	9.64
36	FEPLYIISP	78	0.7000	8.43
37	MRTDSTTLS	342	0.7000	8.43
38	VKKRQKAAG	749	0.7000	8.43
39	IGRPSTYSS	530	0.6000	7.23
40	IVESSRghi	40	0.5000	6.02
41	LAKLDASVS	221	0.5000	6.02
42	VARSGLKK	618	0.5000	6.02
43	LQVTLEDA	771	0.5000	6.02
44	ITLDEALKI	828	0.5000	6.02
45	LRGLLKDVD	95	0.4000	4.82
46	MVFHEITEP	135	0.4000	4.82
47	WVAVAVTGL	560	0.4000	4.82
48	YSSIIKTIQ	536	0.3000	3.61
49	LERLVAGDT	665	0.3000	3.61
50	VAVAVTGLL	561	0.2000	2.41
51	LRELGTDPA	853	0.2000	2.41
52	LLETLPRI	122	0.1500	1.81
53	VSELRGLLK	92	0.1000	1.20
54	LRFSAERTM	319	0.1000	1.20
55	LEGIDAREV	632	0.1000	1.20
56	LPHLTPGQR	489	-0.1000	0
57	IVELTPDGH	500	-0.1200	0
58	IVESPTKAR	21	-0.2000	0
59	LGSGYIVES	35	-0.2000	0
60	YITYMRTDS	338	-0.2000	0
61	IRPAGETFA	391	-0.2000	0
62	VTLEDALRL	774	-0.2000	0
63	VAGRRVATG	245	-0.3000	0
64	FPGFLKAYV	463	-0.3000	0

65	LVTEDQIFT	819	-0.3000	0
66	VESPTKARK	22	-0.4000	0
67	LKPRIPVKR	126	-0.4000	0
68	IRAAAEHPR	145	-0.4000	0
69	LYGYEVSPV	172	-0.4000	0
70	YELIWQRTV	419	-0.4000	0
71	VETVDELVG	471	-0.4000	0
72	ILPEPAADA	734	-0.4000	0
73	LDEALKIYA	830	-0.4000	0
74	INAARTQAR	354	-0.5000	0
75	VHKKGSALV	549	-0.5000	0
76	LVAGDTGEP	668	-0.5000	0
77	LKIYAEPKR	834	-0.5500	0
78	WARLGVNVD	67	-0.7000	0
79	IISPEKRST	83	-0.7000	0
80	LKDVDLYL	99	-0.7000	0
81	IVARERDRM	202	-0.7000	0
82	FRSAAYWDI	212	-0.7000	0
83	IVAREGRFG	720	-0.7000	0
84	LLADRRARG	903	-0.7000	0
85	LTFPGFLKA	461	-0.8000	0
86	FLKAYVETV	466	-0.8000	0
87	IFTITLDEA	825	-0.8000	0
88	VIVESPTKA	20	-0.9000	0

ALLELE: DRB1_1106	Threshold for 3 % with score: 2.0	Highest Score achievable by any peptide: 8.3
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Rank	Sequence	At Position	Score	% of Highest Score
1	LRLLSLPRV	780	3.7500	45.18
2	IRDLPRAAS	48	3.7000	44.58
3	LVIVESPTK	19	3.5500	42.77
4	WDILAKLDA	218	3.1000	37.35
5	FRLYELIWQ	416	3.0000	36.14

6	WHLLETLPK	120	2.9000	34.94
7	LVPSWVAF	556	2.9000	34.94
8	VVGVDPASG	788	2.2000	26.51
9	MSIAQRLYE	327	2.0000	24.10
10	VKALEELGI	522	2.0000	24.10
11	LEDALRLLS	776	2.0000	24.10
12	VQSVATRII	194	1.9000	22.89
13	LVGINLEGI	627	1.8000	21.69
14	LQVAEELFA	694	1.8000	21.69
15	LRSMDLQTV	766	1.8000	21.69
16	LLSLPRVVG	782	1.7000	20.48
17	LIWQRTVAS	421	1.6000	19.28
18	LYIISPEKR	81	1.5000	18.07
19	WKKVAPKLS	182	1.5000	18.07
20	VLWKKVAPK	180	1.4000	16.87
21	VVFSATGRT	452	1.4000	16.87
22	YEVSPVLWK	175	1.3000	15.66
23	LKKLVGINL	624	1.3000	15.66
24	YVRVGKNGP	655	1.2000	14.46
25	MTLSLRITG	437	1.1000	13.25
26	LSLRITGMS	439	1.1000	13.25
27	FAVTGLLEQ	563	1.1000	13.25
28	FDSLGLTRK	256	1.0000	12.05
29	MVIKDGRFG	866	1.0000	12.05
30	LRITGMSGH	441	0.9800	11.81
31	VKRMVFHEI	132	0.9000	10.84
32	VIVLDEGSA	268	0.9000	10.84
33	IWQRTVASQ	422	0.9000	10.84
34	LGTLRKGDE	259	0.8000	9.64
35	LTPGQRDI	492	0.8000	9.64
36	FEPLYIISP	78	0.7000	8.43
37	MRTDSTTLS	342	0.7000	8.43
38	VKKRQKAAG	749	0.7000	8.43
39	IGRPSTYSS	530	0.6000	7.23

40	IVESSRGHI	40	0.5000	6.02
41	LAKLDASVS	221	0.5000	6.02
42	VARSGLKK	618	0.5000	6.02
43	LQTVLEDA	771	0.5000	6.02
44	ITLDEALKI	828	0.5000	6.02
45	LRGLLKDVD	95	0.4000	4.82
46	MVFHEITEP	135	0.4000	4.82
47	WVAVAVTGL	560	0.4000	4.82
48	YSSIIKTIQ	536	0.3000	3.61
49	LERLVAGDT	665	0.3000	3.61
50	VAVAVTGLL	561	0.2000	2.41
51	LRELGTDPA	853	0.2000	2.41
52	LLETLPRI	122	0.1500	1.81
53	VSELRGLLK	92	0.1000	1.20
54	LRFSAERTM	319	0.1000	1.20
55	LEGIDAREV	632	0.1000	1.20
56	LPHLTPGQR	489	-0.1000	0
57	IVELTPDGH	500	-0.1200	0
58	IVESPTKAR	21	-0.2000	0
59	LGSYIVES	35	-0.2000	0
60	YITYMRTDS	338	-0.2000	0
61	IRPAGETFA	391	-0.2000	0
62	VTLEDALRL	774	-0.2000	0
63	VAGRRVATG	245	-0.3000	0
64	FPGFLKAYV	463	-0.3000	0
65	LVTEDQIFT	819	-0.3000	0
66	VESPTKARK	22	-0.4000	0
67	LKPRIPVKR	126	-0.4000	0
68	IRAAAEHPR	145	-0.4000	0
69	LYGYEVSPV	172	-0.4000	0
70	YELIWQRTV	419	-0.4000	0
71	VETVDELVG	471	-0.4000	0
72	ILPEPAADA	734	-0.4000	0
73	LDEALKIYA	830	-0.4000	0

74	INAARTQAR	354	-0.5000	0
75	VHKKGSALV	549	-0.5000	0
76	LVAGDTGEP	668	-0.5000	0
77	LKIYAEPKR	834	-0.5500	0
78	WARLGVNVD	67	-0.7000	0
79	IISPEKRST	83	-0.7000	0
80	LKDVDELYL	99	-0.7000	0
81	IVARERDRM	202	-0.7000	0
82	FRSAAYWDI	212	-0.7000	0
83	IVAREGRFG	720	-0.7000	0
84	LLADRRARG	903	-0.7000	0
85	LTFPGFLKA	461	-0.8000	0
86	FLKAYVETV	466	-0.8000	0
87	IFTITLDEA	825	-0.8000	0
88	VIVESPTKA	20	-0.9000	0

ALLELE: DRB1_1107	Threshold for 3 % with score: 2.1	Highest Score achievable by any peptide: 9.1
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Rank	Sequence	At Position	Score	% of Highest Score
1	MRTDSTTLS	342	5.9000	64.84
2	LVPSWVAFA	556	4.3000	47.25
3	LVIVESPTK	19	3.9000	42.86
4	LDIDLVDAQ	155	3.6000	39.56
5	VIKDGRFGP	867	3.6000	39.56
6	IVLDEGSAT	269	3.5700	39.23
7	LRLLSLPRV	780	3.4000	37.36
8	VVFSATGRT	452	3.3000	36.26
9	LLADRRARG	903	3.3000	36.26
10	ITPDELTLQ	687	3.2000	35.16
11	ITLDEALKI	828	3.2000	35.16
12	LGSGYIVES	35	2.8000	30.77
13	LIWQRTVAS	421	2.8000	30.77
14	IRDLPRAAS	48	2.6000	28.57

15	LGTDPASGK	856	2.5700	28.24
16	LVGINLEGI	627	2.5000	27.47
17	IVESSRGIH	40	2.4000	26.37
18	LGLDPETGH	710	2.3800	26.15
19	FRLYELIWQ	416	2.3000	25.27
20	LYIISPEKR	81	2.2000	24.18
21	MVFHEITEP	135	2.2000	24.18
22	LVGGEADDA	477	2.2000	24.18
23	VDYDFTAAM	577	2.2000	24.18
24	LVAGDTGEP	668	2.2000	24.18
25	MTLSLRITG	437	2.1000	23.08
26	LGIGRPSTY	528	2.0700	22.75
27	VTEDQIFTI	820	2.0000	21.98
28	LRITGMSGH	441	1.9500	21.43
29	YVTDGETNA	876	1.9000	20.88
30	LRSMDLQTV	766	1.8000	19.78
31	VVGVDPASG	788	1.8000	19.78
32	YVRVGKNGP	655	1.7100	18.79
33	LTPGQRDI	492	1.7000	18.68
34	VRVGKNGPY	656	1.7000	18.68
35	VGVDPASGE	789	1.6700	18.35
36	IGRPSTYSS	530	1.6500	18.13
37	LRGLLKDVD	95	1.4000	15.38
38	YEVSPVLWK	175	1.4000	15.38
39	LLSLPRVVG	782	1.4000	15.38
40	LSLRITGMS	439	1.3000	14.29
41	LQTVTLEDA	771	1.2000	13.19
42	LRELGTDPA	853	1.2000	13.19
43	LRKGDDVAS	886	1.2000	13.19
44	IVARERDRM	202	1.1000	12.09
45	LTPDGHATN	503	1.1000	12.09
46	YSSIIKTIQ	536	1.1000	12.09
47	VIVESPTKA	20	1.0000	10.99
48	VQSVATRII	194	1.0000	10.99

49	LRFSAERTM	319	1.0000	10.99
50	IRPAGETFA	391	1.0000	10.99
51	VLWKKVAPK	180	0.9000	9.89
52	LYGDEYVAP	364	0.9000	9.89
53	IFTITLDEA	825	0.9000	9.89
54	IVELTPDGH	500	0.8800	9.67
55	LRKGDEVIV	262	0.8000	8.79
56	LAKLDASVS	221	0.7700	8.46
57	YIISPEKRS	82	0.7000	7.69
58	WDILAKLDA	218	0.7000	7.69
59	MSIAQRLYE	327	0.7000	7.69
60	YITYMRTDS	338	0.7000	7.69
61	VAFAVTGLL	561	0.7000	7.69
62	LEDALRLLS	776	0.7000	7.69
63	LYGYEVSPV	172	0.6700	7.36
64	LKRGNDSRS	810	0.6700	7.36
65	VTDGETNAS	877	0.6100	6.70
66	VFHEITEPA	136	0.6000	6.59
67	LSAGRVQSV	189	0.6000	6.59
68	IWQRTVASQ	422	0.6000	6.59
69	VARSGGLKK	618	0.6000	6.59
70	IVESPTKAR	21	0.5000	5.49
71	WHLLETLPK	120	0.5000	5.49
72	LLETLPKRI	122	0.5000	5.49
73	INAARTQAR	354	0.5000	5.49
74	VNSIKLFDD	640	0.5000	5.49
75	LFDDTHGRP	645	0.5000	5.49
76	LQVAEELFA	694	0.5000	5.49
77	YTRKVKNAQ	377	0.4100	4.51
78	VNVDADFEP	72	0.4000	4.40
79	WKKVAPKLS	182	0.4000	4.40
80	VAGDTGEPT	669	0.4000	4.40
81	VKKRQKAAG	749	0.4000	4.40
82	LSLPRVVGCV	783	0.4000	4.40

83	VESPTKARK	22	0.3000	3.30
84	VIVLDEGSA	268	0.3000	3.30
85	YENGYITYM	334	0.3000	3.30
86	FLKAYVETV	466	0.3000	3.30
87	ILPEPAADA	734	0.3000	3.30
88	LGTLRKGDE	259	0.2000	2.20
89	WVAFAVTGL	560	0.2000	2.20
90	LKPRIPVKR	126	0.1000	1.10

ALLELE: DRB1_1114	Threshold for 3 % with score: 1.3	Highest Score achievable by any peptide: 8.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	3.8000	45.24
2	YTRKVKNAQ	377	3.4000	40.48
3	MVIKDGRFG	866	2.9000	34.52
4	WDILAKLDA	218	2.3000	27.38
5	YITYMRTDS	338	2.3000	27.38
6	YGPYLKRGN	806	2.3000	27.38
7	WVAFAVTGL	560	2.2000	26.19
8	WHLLETLPK	120	2.1000	25.00
9	LIWQRTVAS	421	2.1000	25.00
10	IRDLPRAAS	48	2.0000	23.81
11	LVPSWVAFA	556	2.0000	23.81
12	YVRVGKNGP	655	2.0000	23.81
13	MVFHEITEP	135	1.9000	22.62
14	VLWKKVAPK	180	1.7000	20.24
15	YIVESSRGH	39	1.6800	20.00
16	LRLLSLPRV	780	1.6000	19.05
17	WKKVAPKLS	182	1.4000	16.67
18	YIISPEKRS	82	1.3000	15.48
19	YEVSPVLWK	175	1.3000	15.48
20	YVAPAPRQY	369	1.3000	15.48
21	LRSMDLQTV	766	1.3000	15.48



22	VQSVATRII	194	1.2000	14.29
23	FRSAAYWDI	212	1.1000	13.10
24	FPGFLKAYV	463	1.1000	13.10
25	LVIVESPTK	19	0.8000	9.52
26	LRFSAERTM	319	0.8000	9.52
27	IWQRTVASQ	422	0.8000	9.52
28	IVAREGRFG	720	0.8000	9.52
29	WARLGVNVD	67	0.7000	8.33
30	FSARLTAVA	238	0.7000	8.33
31	YELIWQRTV	419	0.7000	8.33
32	VKKRQKAAG	749	0.6000	7.14
33	FLKAYVETV	466	0.5000	5.95
34	YVHKKGSAL	548	0.5000	5.95
35	FAVTGLLEQ	563	0.5000	5.95
36	LLSLPRVVG	782	0.5000	5.95
37	IVARERDRM	202	0.4000	4.76
38	MRTDSTTLS	342	0.4000	4.76
39	LEQHFGRLV	569	0.4000	4.76
40	IYAEPKRRG	836	0.3000	3.57
41	VKRMVFHEI	132	0.2000	2.38
42	FDSLGLTRK	256	0.2000	2.38
43	YSSIIKTIQ	536	0.2000	2.38
44	IISPEKRST	83	0.1000	1.19
45	LYGYEVSPV	172	0.1000	1.19
46	LRGLLKDVD	95	-0.1000	0
47	LETLKPRIP	123	-0.1000	0
48	MSIAQRLYE	327	-0.1000	0
49	LSLRITGMS	439	-0.1000	0
50	LEDALRLLS	776	-0.1000	0
51	VVGVDPASG	788	-0.1000	0
52	LRITGMSGH	441	-0.1200	0
53	VHKKGSALV	549	-0.2000	0
54	WLNNFYFGG	602	-0.2000	0
55	FEPLYIISP	78	-0.3000	0

56	LQVAEELFA	694	-0.3000	0
57	LRELGTDPA	853	-0.3000	0
58	VAGRRVATG	245	-0.4000	0
59	LVGINLEGI	627	-0.4000	0
60	LGSGYIVES	35	-0.5000	0
61	YKSQPWARL	62	-0.5000	0
62	YPPFMTSTL	303	-0.5000	0
63	WQRTVASQM	423	-0.5000	0
64	VFSATGRTL	453	-0.5000	0
65	YLERLVAGD	664	-0.5000	0
66	IIVARERDR	201	-0.6000	0
67	VVFSATGRT	452	-0.6000	0
68	YVTEILPEP	730	-0.6000	0
69	IVELTPDGH	500	-0.6200	0
70	LYIISPEKR	81	-0.7000	0
71	YGDEYVAPA	365	-0.7000	0
72	VPSWVAFVAV	557	-0.7000	0
73	LAKLDASVS	221	-0.8000	0
74	LQQEASRKL	311	-0.8000	0
75	INAARTQAR	354	-0.8000	0
76	IRPAGETFA	391	-0.8000	0
77	VKALEELGI	522	-0.8000	0
78	LEGIDAREV	632	-0.8000	0
79	ILPEPAADA	734	-0.8000	0
80	VIVESPTKA	20	-0.9000	0
81	IVESPTKAR	21	-0.9000	0
82	IRAAAEHPR	145	-0.9000	0
83	FSAERTMSI	321	-0.9000	0
84	ITAQNGRYG	799	-0.9000	0
85	LKIYAEPKR	834	-0.9000	0
86	VAPKLSAGR	185	-1.0000	0
87	MAFRSAAYW	210	-1.0000	0
88	VIKDGRFGP	867	-1.0000	0

ALLELE: DRB1_1120	Threshold for 3 % with score: 2.1	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MVIKDGRFG	866	4.3000	48.86
2	WVAFAVTGL	560	3.1600	35.91
3	WHLLETLPK	120	3.1000	35.23
4	FRLYELIQ	416	3.1000	35.23
5	YGPYLKRG	806	3.1000	35.23
6	YVRVGKNGP	655	3.0000	34.09
7	MVFHEITEP	135	2.9000	32.95
8	YITYMRTDS	338	2.7000	30.68
9	YTRKVKNAQ	377	2.7000	30.68
10	YVAPAPRQY	369	2.6000	29.55
11	LRLSLPRV	780	2.6000	29.55
12	LIWQRTVAS	421	2.5000	28.41
13	IRDLPRAAS	48	2.4000	27.27
14	WDILAKLDA	218	2.3000	26.14
15	LRFSAERTM	319	2.3000	26.14
16	LRSMDLQTV	766	2.3000	26.14
17	IVAREGRFG	720	2.2000	25.00
18	VQSVATRII	194	2.1000	23.86
19	FPGFLKAYV	463	2.1000	23.86
20	FRSAAYWDI	212	2.0000	22.73
21	LVPSWVFA	556	2.0000	22.73
22	VKKRQKAAG	749	2.0000	22.73
23	IVARERDRM	202	1.9000	21.59
24	LLSLPRVVG	782	1.9000	21.59
25	WARLGVNVD	67	1.8000	20.45
26	VLWKKVAPK	180	1.8000	20.45
27	WKKVAPKLS	182	1.8000	20.45
28	YIISPEKRS	82	1.7000	19.32
29	YELIQRTV	419	1.7000	19.32
30	IYAEPKRRG	836	1.7000	19.32

31	LKPRIPVKR	126	1.5000	17.05
32	FLKAYVETV	466	1.5000	17.05
33	YVHKKGSAL	548	1.4600	16.59
34	YEVSPLWK	175	1.4000	15.91
35	LEQHFGRLV	569	1.4000	15.91
36	MSIAQRLEYE	327	1.3000	14.77
37	VVGVDPASG	788	1.3000	14.77
38	WLNNFYFGG	602	1.2000	13.64
39	YIVESSRGH	39	1.1000	12.50
40	VKRMVFHEI	132	1.1000	12.50
41	LYGYEVSPV	172	1.1000	12.50
42	LRGLLKDVD	95	1.0000	11.36
43	VAGRRVATG	245	1.0000	11.36
44	WQRTVASQM	423	1.0000	11.36
45	FGPYVTEIL	727	0.9600	10.91
46	LVIVESPTK	19	0.9000	10.23
47	LETLKPRIP	123	0.9000	10.23
48	VDAQETRRI	160	0.9000	10.23
49	IIVARERDR	201	0.9000	10.23
50	LYIISPEKR	81	0.8000	9.09
51	IISPEKRST	83	0.8000	9.09
52	MRTDSTTLS	342	0.8000	9.09
53	VHKKGSALV	549	0.8000	9.09
54	FEPLYIISP	78	0.7000	7.95
55	FSARLTAVA	238	0.7000	7.95
56	INAARTQAR	354	0.7000	7.95
57	IVESPTKAR	21	0.6000	6.82
58	IRAAAEHPR	145	0.6000	6.82
59	YLERLVAGD	664	0.6000	6.82
60	LKIYAEPKR	834	0.6000	6.82
61	VAPKLSAGR	185	0.5000	5.68
62	LVGINLEGI	627	0.5000	5.68
63	ITAQNGRYG	799	0.5000	5.68
64	YKSQPWARL	62	0.4600	5.23

65	YPPFMTSTL	303	0.4600	5.23
66	VFSATGRTL	453	0.4600	5.23
67	IGRPSTYSS	530	0.4000	4.55
68	YVTEILPEP	730	0.4000	4.55
69	VATRIIVAR	197	0.3000	3.41
70	FDSLGLTRK	256	0.3000	3.41
71	MTLSLRITG	437	0.3000	3.41
72	LSLRITGMS	439	0.3000	3.41
73	VPSWVAFAV	557	0.3000	3.41
74	IYVRVGKNG	654	0.3000	3.41
75	LEDALRLLS	776	0.3000	3.41
76	LEGIDAREV	632	0.2000	2.27
77	FGPYVTDGE	873	0.2000	2.27
78	LQQEASRKL	311	0.1600	1.82
79	IWQRTVASQ	422	0.1000	1.14
80	VVFSATGRT	452	0.1000	1.14
81	VKALEELGI	522	0.1000	1.14
82	LGSYIVES	35	-0.1000	0
83	YARRPYPPF	298	-0.1000	0
84	FGRLVDYDF	573	-0.1000	0
85	VAREGRFGP	721	-0.1000	0
86	MSGHQEVVF	446	-0.2000	0

ALLELE: DRB1_1121	Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.4
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Rank	Sequence	At Position	Score	% of Highest Score
1	MVIKDGRFG	866	3.9000	46.43
2	LIWQRTVAS	421	3.1000	36.90
3	IRDLPRAAS	48	3.0000	35.71
4	LVPSWVAFA	556	3.0000	35.71
5	MVFHEITEP	135	2.9000	34.52
6	FRLYELIWQ	416	2.8000	33.33
7	VLWKKVAPK	180	2.7000	32.14

8	LRLSLPRV	780	2.6000	30.95
9	YTRKVKNAQ	377	2.4000	28.57
10	LRSMDLQTV	766	2.3000	27.38
11	VQSVATRII	194	2.2000	26.19
12	LVIVESPTK	19	1.8000	21.43
13	LRFSAERTM	319	1.8000	21.43
14	IWQRTVASQ	422	1.8000	21.43
15	IVAREGRFG	720	1.8000	21.43
16	VKKRQKAAG	749	1.6000	19.05
17	LLSLPRVVG	782	1.5000	17.86
18	IVARERDRM	202	1.4000	16.67
19	MRTDSTTLS	342	1.4000	16.67
20	LEQHFGRLV	569	1.4000	16.67
21	WDILAKLDA	218	1.3000	15.48
22	YITYMRTDS	338	1.3000	15.48
23	YGPYLKRGV	806	1.3000	15.48
24	IYAEPKRRG	836	1.3000	15.48
25	VKRMVFHEI	132	1.2000	14.29
26	WVAFAVTGL	560	1.2000	14.29
27	IISPEKRST	83	1.1000	13.10
28	WHLLETLKP	120	1.1000	13.10
29	LYGYEVSPV	172	1.1000	13.10
30	LKPRIPVKR	126	1.0000	11.90
31	VDAQETRRI	160	1.0000	11.90
32	IGRPSTYSS	530	1.0000	11.90
33	YVRVGKNGP	655	1.0000	11.90
34	LRGLLKDVD	95	0.9000	10.71
35	LETLKPRIP	123	0.9000	10.71
36	MSIAQRLYE	327	0.9000	10.71
37	LSLRITGMS	439	0.9000	10.71
38	LEDALRLLS	776	0.9000	10.71
39	VVGVDPASG	788	0.9000	10.71
40	LRITGMSGH	441	0.8800	10.48
41	VHKKGSALV	549	0.8000	9.52

42	LQVAEELFA	694	0.7000	8.33
43	LRELGTDPA	853	0.7000	8.33
44	YIVESSRGH	39	0.6800	8.10
45	VAGRRVATG	245	0.6000	7.14
46	LVGINLEGI	627	0.6000	7.14
47	LGSGYIVES	35	0.5000	5.95
48	VFSATGRTL	453	0.5000	5.95
49	WKKVAPKLS	182	0.4000	4.76
50	IIVARERDR	201	0.4000	4.76
51	VVFSATGRT	452	0.4000	4.76
52	IVELTPDGH	500	0.3800	4.52
53	LYIISPEKR	81	0.3000	3.57
54	YIISPEKRS	82	0.3000	3.57
55	YEVSPVLWK	175	0.3000	3.57
56	YVAPAPRQY	369	0.3000	3.57
57	VPSWVAFVAV	557	0.3000	3.57
58	LAKLDASVS	221	0.2000	2.38
59	LQQEASRKL	311	0.2000	2.38
60	INAARTQAR	354	0.2000	2.38
61	IRPAGETFA	391	0.2000	2.38
62	VKALEELGI	522	0.2000	2.38
63	LEGIDAREV	632	0.2000	2.38
64	ILPEPAADA	734	0.2000	2.38
65	VIVESPTKA	20	0.1000	1.19
66	IVESPTKAR	21	0.1000	1.19
67	IRAAAEHPR	145	0.1000	1.19
68	FRSAAYWDI	212	0.1000	1.19
69	FPGFLKAYV	463	0.1000	1.19
70	ITAQNGRYG	799	0.1000	1.19
71	LKIYAEPKR	834	0.1000	1.19
72	MTLSLRITG	437	-0.1000	0
73	LTPGQRLDI	492	-0.1000	0
74	IDAREVNSI	635	-0.1000	0
75	IYVRVGKNG	654	-0.1000	0

76	VAREGRFGP	721	-0.1000	0
77	IPVKRMVFH	130	-0.1200	0
78	VESPTKARK	22	-0.2000	0
79	VATRIIVAR	197	-0.2000	0
80	WARLGVNVD	67	-0.3000	0
81	IAWHLETL	118	-0.3000	0
82	VFHEITEPA	136	-0.3000	0
83	FSARLTAVA	238	-0.3000	0
84	ITYMRTDST	339	-0.3000	0
85	VAPAPRQYT	370	-0.3000	0
86	YELIWQRTV	419	-0.3000	0
87	ITLDEALKI	828	-0.3000	0
88	LTLQVAEEL	692	-0.4000	0
89	LSLPRVGV	783	-0.4000	0

ALLELE: DRB1_1128	Threshold for 3 % with score: 2.15	Highest Score achievable by any peptide: 8.7
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Rank	Sequence	At Position	Score	% of Highest Score
1	WHLETLKP	120	4.9000	56.32
2	WDILAKLDA	218	4.1000	47.13
3	LRLLSLPRV	780	3.7500	43.10
4	FRLYELIWQ	416	3.3000	37.93
5	YVRVGKNGP	655	3.2000	36.78
6	IRDLPRAAS	48	3.1000	35.63
7	WKKVAPKLS	182	2.9000	33.33
8	FEPLYIISP	78	2.7000	31.03
9	LVIVESPTK	19	2.6500	30.46
10	VVGVDPASG	788	2.6000	29.89
11	YEVSPVLWK	175	2.4000	27.59
12	MSIAQRLYE	327	2.4000	27.59
13	WVAFVTGL	560	2.3600	27.13
14	FDSLGTLRK	256	2.1000	24.14
15	LLSLPRVVG	782	2.1000	24.14



16	LYIISPEKR	81	2.0000	22.99
17	VKALEELGI	522	1.9000	21.84
18	LVPSWVAFA	556	1.9000	21.84
19	VQSVATRII	194	1.8000	20.69
20	LRSMDLQTV	766	1.8000	20.69
21	FPGFLKAYV	463	1.7000	19.54
22	LVGINLEGI	627	1.7000	19.54
23	YELIWQRTV	419	1.6000	18.39
24	MTLSLRITG	437	1.5000	17.24
25	WARLGVNVD	67	1.4000	16.09
26	YIISPEKRS	82	1.4000	16.09
27	FAVTGLLEQ	563	1.4000	16.09
28	LEDALRLLS	776	1.4000	16.09
29	MVIKDGRFG	866	1.4000	16.09
30	LKKLVGINL	624	1.2600	14.48
31	FRSAAYWDI	212	1.2000	13.79
32	LGTLRKGDE	259	1.2000	13.79
33	YITYMRTDS	338	1.2000	13.79
34	FLKAYVETV	466	1.2000	13.79
35	WQRTVASQM	423	1.1000	12.64
36	VVFSATGRT	452	1.1000	12.64
37	VKKRQKAAG	749	1.1000	12.64
38	LIWQRTVAS	421	1.0000	11.49
39	VKRMVFHEI	132	0.8000	9.20
40	YVAPAPRQY	369	0.8000	9.20
41	LQVAEELFA	694	0.8000	9.20
42	FSAERTMSI	321	0.7000	8.05
43	LTPGQRLDI	492	0.7000	8.05
44	LRFSAERTM	319	0.6000	6.90
45	YSSIIKTIQ	536	0.6000	6.90
46	LRGLLKDVD	95	0.5000	5.75
47	VLWKKVAPK	180	0.5000	5.75
48	LSLRITGMS	439	0.5000	5.75
49	IVESSRGHI	40	0.4000	4.60

50	MVFHEITEP	135	0.4000	4.60
51	LPHLTPGQR	489	0.4000	4.60
52	FGRLVDYDF	573	0.4000	4.60
53	YGPYLKRGN	806	0.4000	4.60
54	ITLDEALKI	828	0.4000	4.60
55	IVESPTKAR	21	0.3000	3.45
56	YTRKVKNAQ	377	0.3000	3.45
57	YVTEILPEP	730	0.2500	2.87
58	VAFAVTGLL	561	0.1600	1.84
59	LKPRIPVKR	126	0.1000	1.15
60	IRAAAEHPR	145	0.1000	1.15
61	VAGRRVATG	245	0.1000	1.15
62	MRTDSTTLS	342	0.1000	1.15
63	WLNNFYFGG	602	0.1000	1.15
64	LEGIDAREV	632	0.1000	1.15
65	VNSIKLFDD	640	0.1000	1.15
66	LLETLPRI	122	0.0500	0.57
67	LKIYAEPKR	834	-0.0500	0
68	LAKLDASVS	221	-0.1000	0
69	VIVLDEGSA	268	-0.1000	0
70	IVARERDRM	202	-0.2000	0
71	FSARLTAVA	238	-0.2000	0
72	YMRTDSTTL	341	-0.2400	0
73	YVHKKGSAL	548	-0.2400	0
74	VTLEDALRL	774	-0.2400	0
75	YLERLVAGD	664	-0.3000	0
76	IVAREGRFG	720	-0.3000	0
77	LLADRRARG	903	-0.3000	0
78	YPPFMTSTL	303	-0.3400	0
79	FHEITEPAI	137	-0.3500	0
80	YLGSGYIVE	34	-0.4000	0
81	LYGYEVSPV	172	-0.4000	0
82	YDFTAAMED	579	-0.4000	0
83	VARSGLKK	618	-0.4000	0

84	FGPYVTEIL	727	-0.4400	0
85	VHKKGSALV	549	-0.5000	0
86	LVAGDTGEP	668	-0.5000	0
87	LQTVTLEDA	771	-0.5000	0

ALLELE: DRB1_1301	Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MVIKDGRFG	866	5.3000	60.23
2	MVFHEITEP	135	3.9000	44.32
3	LRLSLPRV	780	3.6000	40.91
4	LIWQRTVAS	421	3.5000	39.77
5	IRDLPRAAS	48	3.4000	38.64
6	LRFSAERTM	319	3.3000	37.50
7	LRSMDLQTV	766	3.3000	37.50
8	IVAREGRFG	720	3.2000	36.36
9	VQSVATRII	194	3.1000	35.23
10	LVPSWVAFA	556	3.0000	34.09
11	VKKRQKAAG	749	3.0000	34.09
12	IVARERDRM	202	2.9000	32.95
13	LLSLPRVVG	782	2.9000	32.95
14	VLWKKVAPK	180	2.8000	31.82
15	IYAEPKRRG	836	2.7000	30.68
16	LKPRIPVKR	126	2.5000	28.41
17	LEQHFGRLV	569	2.4000	27.27
18	MSIAQRLYE	327	2.3000	26.14
19	VVGVDPASG	788	2.3000	26.14
20	WVAFAVTGL	560	2.1600	24.55
21	WHLLETLPK	120	2.1000	23.86
22	VKRMVFHEI	132	2.1000	23.86
23	LYGYEVSPV	172	2.1000	23.86
24	FRLYELIWQ	416	2.1000	23.86
25	YGPYLKRGN	806	2.1000	23.86

26	LRGLLKDVD	95	2.0000	22.73
27	VAGRRVATG	245	2.0000	22.73
28	YVRVGKNGP	655	2.0000	22.73
29	LVIVESPTK	19	1.9000	21.59
30	LETLKPRIP	123	1.9000	21.59
31	VDAQETRRI	160	1.9000	21.59
32	IIVARERDR	201	1.9000	21.59
33	LYIISPEKR	81	1.8000	20.45
34	IISPEKRST	83	1.8000	20.45
35	MRTDSTTLS	342	1.8000	20.45
36	VHKKGSALV	549	1.8000	20.45
37	YITYMRTDS	338	1.7000	19.32
38	INAARTQAR	354	1.7000	19.32
39	YTRKVKNAQ	377	1.7000	19.32
40	IVESPTKAR	21	1.6000	18.18
41	IRAAAEHPR	145	1.6000	18.18
42	YVAPAPRQY	369	1.6000	18.18
43	LKIYAEPKR	834	1.6000	18.18
44	VAPKLSAGR	185	1.5000	17.05
45	LVGINLEGI	627	1.5000	17.05
46	ITAQNGRYG	799	1.5000	17.05
47	VFSATGRTL	453	1.4600	16.59
48	IGRPSTYSS	530	1.4000	15.91
49	VATRIIVAR	197	1.3000	14.77
50	WDILAKLDA	218	1.3000	14.77
51	MTLSLRITG	437	1.3000	14.77
52	LSLRITGMS	439	1.3000	14.77
53	VPSWVAFVAV	557	1.3000	14.77
54	IYVRVGKNG	654	1.3000	14.77
55	LEDALRLLS	776	1.3000	14.77
56	LEGIDAREV	632	1.2000	13.64
57	LQQEASRKL	311	1.1600	13.18
58	IWQRTVASQ	422	1.1000	12.50
59	VVFSATGRT	452	1.1000	12.50

60	FPGFLKAYV	463	1.1000	12.50
61	VKALEELGI	522	1.1000	12.50
62	FRSAAYWDI	212	1.0000	11.36
63	VIKDGRFGP	867	1.0000	11.36
64	LLADRRARG	903	1.0000	11.36
65	LGSGYIVES	35	0.9000	10.23
66	VAREGRFGP	721	0.9000	10.23
67	WARLGVNVD	67	0.8000	9.09
68	WKKVAPKLS	182	0.8000	9.09
69	MSGHQEVVF	446	0.8000	9.09
70	LTPGQRDI	492	0.8000	9.09
71	IDAREVNSI	635	0.8000	9.09
72	VPAKKAAGR	924	0.8000	9.09
73	YIISPEKRS	82	0.7000	7.95
74	YELIWQRTV	419	0.7000	7.95
75	LQVAEELFA	694	0.7000	7.95
76	LRELGTDPA	853	0.7000	7.95
77	IAWHLETL	118	0.6600	7.50
78	LAKLDASVS	221	0.6000	6.82
79	VNSIKLFDD	640	0.6000	6.82
80	VGKNGPYLE	658	0.6000	6.82
81	LSLPRVGV	783	0.6000	6.82
82	ITLDEALKI	828	0.6000	6.82
83	LTLQVAEEL	692	0.5600	6.36
84	FLKAYVETV	466	0.5000	5.68
85	YVHKKGSAL	548	0.4600	5.23
86	IVESSRGI	40	0.4000	4.55
87	VPAKYKSP	58	0.4000	4.55
88	YEVSPVLWK	175	0.4000	4.55
89	LGTLRKGDE	259	0.4000	4.55
90	ITYMRTDST	339	0.4000	4.55
91	VAPAPRQYT	370	0.4000	4.55
92	LGIGRPSTY	528	0.4000	4.55
93	INLEGIDAR	630	0.4000	4.55

ALLELE: DRB1_1302	Threshold for 3 % with score: 2.1	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MVIKDGRFG	866	4.3000	48.86
2	WVAFAVTGL	560	3.1600	35.91
3	WHLLETLPK	120	3.1000	35.23
4	FRLYELIWQ	416	3.1000	35.23
5	YGPYLKRGD	806	3.1000	35.23
6	YVRVGKNGP	655	3.0000	34.09
7	MVFHEITEP	135	2.9000	32.95
8	YITYMRTDS	338	2.7000	30.68
9	YTRKVKNAQ	377	2.7000	30.68
10	YVAPAPRQY	369	2.6000	29.55
11	LRLSLPRV	780	2.6000	29.55
12	LIWQRTVAS	421	2.5000	28.41
13	IRDLPRAAS	48	2.4000	27.27
14	WDILAKLDA	218	2.3000	26.14
15	LRFSAERTM	319	2.3000	26.14
16	LRSMDLQTV	766	2.3000	26.14
17	IVAREGRFG	720	2.2000	25.00
18	VQSVATRII	194	2.1000	23.86
19	FPGFLKAYV	463	2.1000	23.86
20	FRSAAYWDI	212	2.0000	22.73
21	LVPSWVAFV	556	2.0000	22.73
22	VKKRQKAAG	749	2.0000	22.73
23	IVARERDRM	202	1.9000	21.59
24	LLSLPRVVG	782	1.9000	21.59
25	WARLGVNVD	67	1.8000	20.45
26	VLWKKVAPK	180	1.8000	20.45
27	WKKVAPKLS	182	1.8000	20.45
28	YIISPEKRS	82	1.7000	19.32
29	YELIWQRTV	419	1.7000	19.32
30	IYAEPKRRG	836	1.7000	19.32

31	LKPRIPVKR	126	1.5000	17.05
32	FLKAYVETV	466	1.5000	17.05
33	YVHKKGSAL	548	1.4600	16.59
34	YEVSPLWK	175	1.4000	15.91
35	LEQHFGRLV	569	1.4000	15.91
36	MSIAQRLYE	327	1.3000	14.77
37	VVGVDPASG	788	1.3000	14.77
38	WLNNFYFGG	602	1.2000	13.64
39	YIVESSRGH	39	1.1000	12.50
40	VKRMVFHEI	132	1.1000	12.50
41	LYGYEVSPV	172	1.1000	12.50
42	LRGLLKDVD	95	1.0000	11.36
43	VAGRRVATG	245	1.0000	11.36
44	WQRTVASQM	423	1.0000	11.36
45	FGPYVTEIL	727	0.9600	10.91
46	LVIVESPTK	19	0.9000	10.23
47	LETLKPRIP	123	0.9000	10.23
48	VDAQETRRI	160	0.9000	10.23
49	IIVARERDR	201	0.9000	10.23
50	LYIISPEKR	81	0.8000	9.09
51	IISPEKRST	83	0.8000	9.09
52	MRTDSTTLS	342	0.8000	9.09
53	VHKKGSALV	549	0.8000	9.09
54	FEPLYIISP	78	0.7000	7.95
55	FSARLTAVA	238	0.7000	7.95
56	INAARTQAR	354	0.7000	7.95
57	IVESPTKAR	21	0.6000	6.82
58	IRAAAEHPR	145	0.6000	6.82
59	YLERLVAGD	664	0.6000	6.82
60	LKIYAEPKR	834	0.6000	6.82
61	VAPKLSAGR	185	0.5000	5.68
62	LVGINLEGI	627	0.5000	5.68
63	ITAQNGRYG	799	0.5000	5.68
64	YKSQPWARL	62	0.4600	5.23

65	YPPFMTSTL	303	0.4600	5.23
66	VFSATGRTL	453	0.4600	5.23
67	IGRPSTYSS	530	0.4000	4.55
68	YVTEILPEP	730	0.4000	4.55
69	VATRIIVAR	197	0.3000	3.41
70	FDSLGLTRK	256	0.3000	3.41
71	MTLSLRITG	437	0.3000	3.41
72	LSLRITGMS	439	0.3000	3.41
73	VPSWVAFAV	557	0.3000	3.41
74	IYVRVGKNG	654	0.3000	3.41
75	LEDALRLLS	776	0.3000	3.41
76	LEGIDAREV	632	0.2000	2.27
77	FGPYVTDGE	873	0.2000	2.27
78	LQQEASRKL	311	0.1600	1.82
79	IWQRTVASQ	422	0.1000	1.14
80	VVFSATGRT	452	0.1000	1.14
81	VKALEELGI	522	0.1000	1.14
82	LGSFYIVES	35	-0.1000	0
83	YARRPYPPF	298	-0.1000	0
84	FGRLVDYDF	573	-0.1000	0
85	VAREGRFGP	721	-0.1000	0
86	MSGHQEVVF	446	-0.2000	0

ALLELE: DRB1_1304	Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 9
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Rank	Sequence	At Position	Score	% of Highest Score
1	MVIKDGRFG	866	5.2000	57.78
2	MSIAQRLYE	327	3.9000	43.33
3	LRGLLKDVD	95	3.6000	40.00
4	FRLYELIWQ	416	3.6000	40.00
5	MVFHEITEP	135	3.3000	36.67
6	YGPYLKRGD	806	3.3000	36.67
7	YTRKVKNAQ	377	3.2000	35.56



8	LIWQRTVAS	421	3.1000	34.44
9	IVAREGRFG	720	3.1000	34.44
10	IRDLPRAAS	48	3.0000	33.33
11	LVPSWVAFA	556	3.0000	33.33
12	LRFSAERTM	319	2.9000	32.22
13	VKKRQKAAG	749	2.9000	32.22
14	LRLSLPRV	780	2.9000	32.22
15	LLSLPRVVG	782	2.8000	31.11
16	IWQRTVASQ	422	2.6000	28.89
17	LRSMDLQTV	766	2.6000	28.89
18	IYAEPKRRG	836	2.6000	28.89
19	IVARERDRM	202	2.5000	27.78
20	WARLGVNVD	67	2.4000	26.67
21	VQSVATRII	194	2.4000	26.67
22	WVAFAVTGL	560	2.2000	24.44
23	VNSIKLFDD	640	2.2000	24.44
24	VGKNGPYLE	658	2.2000	24.44
25	VVGVDPASG	788	2.2000	24.44
26	LRITGMSGH	441	2.1000	23.33
27	IISPEKRST	83	2.0000	22.22
28	VLWKKVAPK	180	2.0000	22.22
29	LGTLRKGDE	259	2.0000	22.22
30	YIVESSRGH	39	1.9000	21.11
31	VAGRRVATG	245	1.9000	21.11
32	ITGMSGHQE	443	1.9000	21.11
33	MDLQTVTLE	769	1.9000	21.11
34	LEQHFGRLV	569	1.7000	18.89
35	IVELTPDGH	500	1.6000	17.78
36	WHLLETLPK	120	1.5000	16.67
37	VKNAQEAHE	381	1.5000	16.67
38	VFSATGRTL	453	1.5000	16.67
39	VKRMVFHEI	132	1.4000	15.56
40	LYGYEVSPV	172	1.4000	15.56
41	MRTDSTTLS	342	1.4000	15.56

42	YVAPAPRQY	369	1.4000	15.56
43	YVRVGKNGP	655	1.4000	15.56
44	ITAQNGRYG	799	1.4000	15.56
45	LETLKPRIP	123	1.3000	14.44
46	WDILAKLDA	218	1.3000	14.44
47	YITYMRTDS	338	1.3000	14.44
48	VVFSATGRT	452	1.3000	14.44
49	VDAQETRRI	160	1.2000	13.33
50	LQQEASRKL	311	1.2000	13.33
51	MTLSLRITG	437	1.2000	13.33
52	IYVRVGKNG	654	1.2000	13.33
53	YLERLVAGD	664	1.2000	13.33
54	LVIVESPTK	19	1.1000	12.22
55	IPVKRMVFH	130	1.1000	12.22
56	VHKKGSALV	549	1.1000	12.22
57	LKPRIPVKR	126	1.0000	11.11
58	IGRPSTYSS	530	1.0000	11.11
59	MAFRSAAYW	210	0.9000	10.00
60	LSLRITGMS	439	0.9000	10.00
61	LEDALRLLS	776	0.9000	10.00
62	LLADRRARG	903	0.9000	10.00
63	LVGINLEGI	627	0.8000	8.89
64	FGPYVTDGE	873	0.8000	8.89
65	IAWHLLETL	118	0.7000	7.78
66	LQVAEELFA	694	0.7000	7.78
67	LRELGTDPA	853	0.7000	7.78
68	FMTSTLQQE	306	0.6000	6.67
69	ITYMRTDST	339	0.6000	6.67
70	VAPAPRQYT	370	0.6000	6.67
71	VPSWVAFAV	557	0.6000	6.67
72	LTLQVAEEL	692	0.6000	6.67
73	LGSGYIVES	35	0.5000	5.56
74	YVHKKGSAL	548	0.5000	5.56
75	LEGIDAREV	632	0.5000	5.56

76	WKKVAPKLS	182	0.4000	4.44
77	IIVARERDR	201	0.4000	4.44
78	FPGFLKAYV	463	0.4000	4.44
79	VKALEELGI	522	0.4000	4.44
80	VIKDGRFGP	867	0.4000	4.44
81	LYIISPEKR	81	0.3000	3.33
82	YIISPEKRS	82	0.3000	3.33
83	FRSAAYWDI	212	0.3000	3.33
84	FAVTGLLEQ	563	0.3000	3.33
85	LKKLVGINL	624	0.3000	3.33
86	VAREGRFGP	721	0.3000	3.33
87	VTLEDALRL	774	0.3000	3.33
88	LWKKVAPKL	181	0.2000	2.22
89	LAKLDASVS	221	0.2000	2.22
90	INAARTQAR	354	0.2000	2.22
91	IRPAGETFA	391	0.2000	2.22
92	LKAYVETVD	467	0.2000	2.22
93	LGIGRPSTY	528	0.2000	2.22

ALLELE: DRB1_1305	Threshold for 3 % with score: 2.2	Highest Score achievable by any peptide: 8.7		
Rank	Sequence	At Position	Score	% of Highest Score
1	WHLLETLPK	120	4.9000	56.32
2	WDILAKLDA	218	4.1000	47.13
3	LRLLSLPRV	780	3.7500	43.10
4	FRLYELIWQ	416	3.3000	37.93
5	YVRVGKNGP	655	3.2000	36.78
6	IRDLPRAAS	48	3.1000	35.63
7	WKKVAPKLS	182	2.9000	33.33
8	FEPLYIISP	78	2.7000	31.03
9	LVIVESPTK	19	2.6500	30.46
10	VVGVDPASG	788	2.6000	29.89
11	YEVSPVLWK	175	2.4000	27.59

12	MSIAQRLYE	327	2.4000	27.59
13	WVAFVAVTGL	560	2.3600	27.13
14	FDSLGLTRK	256	2.1000	24.14
15	LLSLPRVVG	782	2.1000	24.14
16	LYIISPEKR	81	2.0000	22.99
17	VKALEELGI	522	1.9000	21.84
18	LVPSWVAFA	556	1.9000	21.84
19	VQSVATRII	194	1.8000	20.69
20	LRSMDLQTV	766	1.8000	20.69
21	FPGFLKAYV	463	1.7000	19.54
22	LVGINLEGI	627	1.7000	19.54
23	YELIWQRTV	419	1.6000	18.39
24	MTLSLRITG	437	1.5000	17.24
25	WARLGVNVD	67	1.4000	16.09
26	YIISPEKRS	82	1.4000	16.09
27	FAVTGLLEQ	563	1.4000	16.09
28	LEDALRLLS	776	1.4000	16.09
29	MVIKDGRFG	866	1.4000	16.09
30	LKKLVGINL	624	1.2600	14.48
31	FRSAAYWDI	212	1.2000	13.79
32	LGTLRKGDE	259	1.2000	13.79
33	YITYMRTDS	338	1.2000	13.79
34	FLKAYVETV	466	1.2000	13.79
35	WQRTVASQM	423	1.1000	12.64
36	VVFSATGRT	452	1.1000	12.64
37	VKKRQKAAG	749	1.1000	12.64
38	LIWQRTVAS	421	1.0000	11.49
39	VKRMVFHEI	132	0.8000	9.20
40	YVAPAPRQY	369	0.8000	9.20
41	LQVAEELFA	694	0.8000	9.20
42	FSAERTMSI	321	0.7000	8.05
43	LTPGQRLDI	492	0.7000	8.05
44	LRFSARTM	319	0.6000	6.90
45	YSSIIKTIQ	536	0.6000	6.90

46	LRGLLDVD	95	0.5000	5.75
47	VLWKKVAPK	180	0.5000	5.75
48	LSLRITGMS	439	0.5000	5.75
49	IVESSRGI	40	0.4000	4.60
50	MVFHEITEP	135	0.4000	4.60
51	LPHLTPGQR	489	0.4000	4.60
52	FGRLVDYDF	573	0.4000	4.60
53	YGPYLKRGD	806	0.4000	4.60
54	ITLDEALKI	828	0.4000	4.60
55	IVESPTKAR	21	0.3000	3.45
56	YTRKVKNAQ	377	0.3000	3.45
57	YVTEILPEP	730	0.2500	2.87
58	VAFAVTGLL	561	0.1600	1.84
59	LKPRIPVKR	126	0.1000	1.15
60	IRAAAEHPR	145	0.1000	1.15
61	VAGRRVATG	245	0.1000	1.15
62	MRTDSTTLS	342	0.1000	1.15
63	WLNNFYFGG	602	0.1000	1.15
64	LEGIDAREV	632	0.1000	1.15
65	VNSIKLFDD	640	0.1000	1.15
66	LLETLPRI	122	0.0500	0.57
67	LKIYAEPKR	834	-0.0500	0
68	LAKLDASVS	221	-0.1000	0
69	VIVLDEGSA	268	-0.1000	0
70	IVARERDRM	202	-0.2000	0
71	FSARLTAVA	238	-0.2000	0
72	YMRTDSTTL	341	-0.2400	0
73	YVHKKGSAL	548	-0.2400	0
74	VTLEDALRL	774	-0.2400	0
75	YLERLVAGD	664	-0.3000	0
76	IVAREGRFG	720	-0.3000	0
77	LLADRRARG	903	-0.3000	0
78	YPPFMTSTL	303	-0.3400	0
79	FHEITEPAI	137	-0.3500	0

80	YLGSGYIVE	34	-0.4000	0
81	LYGYEVSPV	172	-0.4000	0
82	YDFTAAMED	579	-0.4000	0
83	VARSGGLKK	618	-0.4000	0
84	FGPYVTEIL	727	-0.4400	0
85	VHKKGSALV	549	-0.5000	0
86	LVAGDTGEP	668	-0.5000	0
87	LQTVTLEDA	771	-0.5000	0

Rank	Sequence	At Position	Score	% of Highest Score
ALLELE: DRB1_1307		Threshold for 3 % with score: 0.6	Highest Score achievable by any peptide: 6.8	
1	IRDLPRAAS	48	2.7000	39.71
2	FRLYELIWQ	416	2.4000	35.29
3	WDILAKLDA	218	2.3000	33.82
4	WHLLETLPK	120	2.1000	30.88
5	WKKVAPKLS	182	1.9000	27.94
6	LVPSWVAFA	556	1.9000	27.94
7	YVRVGKNGP	655	1.9000	27.94
8	LRLLSLPRV	780	1.6000	23.53
9	LVIVESPTK	19	1.4000	20.59
10	VVGVDPASG	788	1.2000	17.65
11	VQSVATRII	194	0.7000	10.29
12	YTRKVKNAQ	377	0.7000	10.29
13	FPGFLKAYV	463	0.7000	10.29
14	LRSMDLQTV	766	0.7000	10.29
15	YEVSPVLWK	175	0.5000	7.35
16	YIISPEKRS	82	0.4000	5.88
17	VLWKKVAPK	180	0.4000	5.88
18	YELIWQRTV	419	0.4000	5.88
19	VVFSATGRT	452	0.3000	4.41
20	WVAFAVTGL	560	0.3000	4.41
21	FAVTGLLEQ	563	0.3000	4.41

22	FDSLGLTRK	256	0.2000	2.94
23	YSSIIKTIQ	536	0.2000	2.94
24	LLSLPRVVG	782	0.2000	2.94
25	FEPLYIISP	78	0.1000	1.47
26	LIWQRTVAS	421	0.1000	1.47
27	LRITGMSGH	441	-0.0200	0
28	IWQRTVASQ	422	-0.1000	0
29	FSARLTAVA	238	-0.2000	0
30	VIVLDEGSA	268	-0.2000	0
31	MVIKDGRFG	866	-0.2000	0
32	LRGLLKDVD	95	-0.3000	0
33	LGTLRKGDE	259	-0.3000	0
34	YITYMRTDS	338	-0.3000	0
35	LVGINLEGI	627	-0.3000	0
36	VKKRQKAAG	749	-0.3000	0
37	WQRTVASQM	423	-0.4000	0
38	FRSAAYWDI	212	-0.5000	0
39	LAKLDASVS	221	-0.5000	0
40	LRELGTDPA	853	-0.5000	0
41	IVESSRGGH	40	-0.6000	0
42	LYIISPEKR	81	-0.6000	0
43	YGPYLKRGH	806	-0.6000	0
44	YVAPAPRQY	369	-0.7000	0
45	YIVESSRGGH	39	-0.7200	0
46	VKRMVFHEI	132	-0.8000	0
47	MSIAQRLYE	327	-0.8000	0
48	VKALEELGI	522	-0.8000	0
49	LERLVAGDT	665	-0.8000	0
50	LEDALRLLS	776	-0.8000	0
51	IVELTPDGH	500	-0.8200	0
52	FLKAYVETV	466	-0.9000	0
53	VAFVTGLL	561	-0.9000	0
54	LQVAEELFA	694	-1.0000	0
55	LRFSAERTM	319	-1.1000	0

56	IGRPSTYSS	530	-1.1000	0
57	LEGIDAREV	632	-1.1000	0
58	LETLKPRIP	123	-1.2000	0
59	LPHLTPGQR	489	-1.2000	0
60	YVHKKGSAL	548	-1.2000	0
61	VAGRRVATG	245	-1.3000	0
62	YPPFMTSTL	303	-1.3000	0
63	YGDEYVAPA	365	-1.3000	0
64	LKKLVGINL	624	-1.3000	0
65	VESPTKARK	22	-1.4000	0
66	LYGYEVSPV	172	-1.4000	0
67	IVARERDRM	202	-1.4000	0
68	MRTDSTTLS	342	-1.4000	0
69	YLERLVAGD	664	-1.4000	0
70	ILPEPAADA	734	-1.4000	0
71	YKSQPWARL	62	-1.5000	0
72	MTLSLRITG	437	-1.5000	0
73	VHKKGSALV	549	-1.5000	0
74	VNSIKLFDD	640	-1.5000	0
75	IFTITLDEA	825	-1.5000	0
76	INAARTQAR	354	-1.6000	0
77	LVAGDTGEP	668	-1.6000	0
78	LQTVTLEDA	771	-1.6000	0
79	LGSYIVES	35	-1.7000	0
80	MVFHEITEP	135	-1.7000	0
81	LLADRRARG	903	-1.7000	0
82	IVESPTKAR	21	-1.8000	0
83	FSAERTMSI	321	-1.8000	0
84	WLNNFYFGG	602	-1.8000	0
85	IISPEKRST	83	-1.9000	0
86	LKPRIPVKR	126	-1.9000	0
87	MAFRSAAYW	210	-1.9000	0
88	IVAREGRFG	720	-1.9000	0
89	YVTEILPEP	730	-1.9000	0



90	LLETLPRI	122	-2.0000	0
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ALLELE: DRB1_1311	Threshold for 3 % with score: 2.0	Highest Score achievable by any peptide: 8.3
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Rank	Sequence	At Position	Score	% of Highest Score
1	LRLSLPRV	780	3.7500	45.18
2	IRDLPRAAS	48	3.7000	44.58
3	LVIVESPTK	19	3.5500	42.77
4	WDILAKLDA	218	3.1000	37.35
5	FRLYELIWQ	416	3.0000	36.14
6	WHLLETLPK	120	2.9000	34.94
7	LVPSWVAFA	556	2.9000	34.94
8	VVGVDPASG	788	2.2000	26.51
9	MSIAQRLYE	327	2.0000	24.10
10	VKALEELGI	522	2.0000	24.10
11	LEDALRLLS	776	2.0000	24.10
12	VQSVATRII	194	1.9000	22.89
13	LVGINLEGI	627	1.8000	21.69
14	LQVAEELFA	694	1.8000	21.69
15	LRSMDLQTV	766	1.8000	21.69
16	LLSLPRVVG	782	1.7000	20.48
17	LIWQRTVAS	421	1.6000	19.28
18	LYIISPEKR	81	1.5000	18.07
19	WKKVAPKLS	182	1.5000	18.07
20	VLWKKVAPK	180	1.4000	16.87
21	VVFSATGRT	452	1.4000	16.87
22	YEVSPVLWK	175	1.3000	15.66
23	LKKLVGINL	624	1.3000	15.66
24	YVRVGKNGP	655	1.2000	14.46
25	MTLSLRITG	437	1.1000	13.25
26	LSLRITGMS	439	1.1000	13.25
27	FAVTGLLEQ	563	1.1000	13.25
28	FDSLGLTRK	256	1.0000	12.05

29	MVIKDGRFG	866	1.0000	12.05
30	LRITGMSGH	441	0.9800	11.81
31	VKRMVFHEI	132	0.9000	10.84
32	VIVLDEGSA	268	0.9000	10.84
33	IWQRTVASQ	422	0.9000	10.84
34	LGTLRKGDE	259	0.8000	9.64
35	LTPGQRDI	492	0.8000	9.64
36	FEPLYIISP	78	0.7000	8.43
37	MRTDSTTLS	342	0.7000	8.43
38	VKKRQKAAG	749	0.7000	8.43
39	IGRPSTYSS	530	0.6000	7.23
40	IVESSRGIH	40	0.5000	6.02
41	LAKLDASVS	221	0.5000	6.02
42	VARSGLKK	618	0.5000	6.02
43	LQTVTLEDA	771	0.5000	6.02
44	ITLDEALKI	828	0.5000	6.02
45	LRGLLDVD	95	0.4000	4.82
46	MVFHEITEP	135	0.4000	4.82
47	WVAFAVTGL	560	0.4000	4.82
48	YSSIIKTIQ	536	0.3000	3.61
49	LERLVAGDT	665	0.3000	3.61
50	VAFVAVTGLL	561	0.2000	2.41
51	LRELGTDPA	853	0.2000	2.41
52	LLETLPRI	122	0.1500	1.81
53	VSELRGLLK	92	0.1000	1.20
54	LRFSAERTM	319	0.1000	1.20
55	LEGIDAREV	632	0.1000	1.20
56	LPHLTPGQR	489	-0.1000	0
57	IVELTPDGH	500	-0.1200	0
58	IVESPTKAR	21	-0.2000	0
59	LGSGYIVES	35	-0.2000	0
60	YITYMRTDS	338	-0.2000	0
61	IRPAGETFA	391	-0.2000	0
62	VTLEDALRL	774	-0.2000	0

63	VAGRRVATG	245	-0.3000	0
64	FPGFLKAYV	463	-0.3000	0
65	LVTEDQIFT	819	-0.3000	0
66	VESPTKARK	22	-0.4000	0
67	LKPRIPVKR	126	-0.4000	0
68	IRAAAEHPR	145	-0.4000	0
69	LYGYEVSPV	172	-0.4000	0
70	YELIWQRTV	419	-0.4000	0
71	VETVDELVG	471	-0.4000	0
72	ILPEPAADA	734	-0.4000	0
73	LDEALKIYA	830	-0.4000	0
74	INAARTQAR	354	-0.5000	0
75	VHKKGSALV	549	-0.5000	0
76	LVAGDTGEP	668	-0.5000	0
77	LKIYAEPKR	834	-0.5500	0
78	WARLGVNVD	67	-0.7000	0
79	IISPEKRST	83	-0.7000	0
80	LKDVDLYL	99	-0.7000	0
81	IVARERDRM	202	-0.7000	0
82	FRSAAYWDI	212	-0.7000	0
83	IVAREGRFG	720	-0.7000	0
84	LLADRRARG	903	-0.7000	0
85	LTFPGFLKA	461	-0.8000	0
86	FLKAYVETV	466	-0.8000	0
87	IFTITLDEA	825	-0.8000	0
88	VIVESPTKA	20	-0.9000	0

ALLELE: DRB1_1321	Threshold for 3 % with score: 2.2	Highest Score achievable by any peptide: 8.9		
Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	4.8000	53.93
2	WHLLETLPK	120	4.3000	48.31
3	WDILAKLDA	218	4.1000	46.07

4	MSIAQRLYE	327	4.0000	44.94
5	LRLSLPRV	780	3.0500	34.27
6	WARLGVNVD	67	3.0000	33.71
7	FAVTGLLEQ	563	2.9000	32.58
8	LGTLRKGDE	259	2.8000	31.46
9	IRDLPRAAS	48	2.7000	30.34
10	YVRVGKNGP	655	2.6000	29.21
11	WKKVAPKLS	182	2.5000	28.09
12	VVGVDPASG	788	2.5000	28.09
13	WVAFAVTGL	560	2.4000	26.97
14	FEPLYIISP	78	2.1000	23.60
15	LRGLLKDVD	95	2.1000	23.60
16	YSSIIKTIQ	536	2.1000	23.60
17	LLSLPRVVG	782	2.0000	22.47
18	LVPSWVAFA	556	1.9000	21.35
19	LVIVESPTK	19	1.8500	20.79
20	YTRKVKNAQ	377	1.8000	20.22
21	VNSIKLFDD	640	1.7000	19.10
22	YEVSPVLWK	175	1.6000	17.98
23	YGPYLKRGN	806	1.6000	17.98
24	MTLSLRITG	437	1.4000	15.73
25	FDSLGLTRK	256	1.3000	14.61
26	VVFSATGRT	452	1.3000	14.61
27	LKKLVGINL	624	1.3000	14.61
28	YLERLVAGD	664	1.3000	14.61
29	MVIKDGRFG	866	1.3000	14.61
30	YLGSGYIVE	34	1.2000	13.48
31	LRITGMSGH	441	1.2000	13.48
32	VKALEELGI	522	1.2000	13.48
33	YDFTAAMED	579	1.2000	13.48
34	VQSVATRII	194	1.1000	12.36
35	LRSMDLQTV	766	1.1000	12.36
36	YIISPEKRS	82	1.0000	11.24
37	FPGFLKAYV	463	1.0000	11.24

38	LVGINLEGI	627	1.0000	11.24
39	VKKRQKAAG	749	1.0000	11.24
40	LEDALRLLS	776	1.0000	11.24
41	YELIWQRTV	419	0.9000	10.11
42	VGKNGPYLE	658	0.9000	10.11
43	FMTSTLQQE	306	0.8000	8.99
44	YITYMRTDS	338	0.8000	8.99
45	LQVAEELFA	694	0.8000	8.99
46	YIVESSRGH	39	0.7000	7.87
47	IWQRTVASQ	422	0.7000	7.87
48	WQRTVASQM	423	0.7000	7.87
49	YVAPAPRQY	369	0.6000	6.74
50	LIWQRTVAS	421	0.6000	6.74
51	ITGMSGHQE	443	0.6000	6.74
52	LYIISPEKR	81	0.5000	5.62
53	FRSAAYWDI	212	0.5000	5.62
54	VKNAQEAHE	381	0.5000	5.62
55	FLKAYVETV	466	0.5000	5.62
56	YWDILAKLD	217	0.3000	3.37
57	LRFSAERTM	319	0.2000	2.25
58	VAFAVTGLL	561	0.2000	2.25
59	VGINLEGID	628	0.2000	2.25
60	LERLVAGDT	665	0.2000	2.25
61	VKRMVFHEI	132	0.1000	1.12
62	LSLRITGMS	439	0.1000	1.12
63	IVELTPDGH	500	0.1000	1.12
64	VIVLDEGSA	268	-0.1000	0
65	VETVDELVG	471	-0.1000	0
66	LNNFYFGGD	603	-0.1000	0
67	MVFHEITEP	135	-0.2000	0
68	FSARLTAVA	238	-0.2000	0
69	YMRTDSTTL	341	-0.2000	0
70	YVHKKGSAL	548	-0.2000	0
71	VTLEDALRL	774	-0.2000	0

72	IVESSRGHI	40	-0.3000	0
73	VLWKKVAPK	180	-0.3000	0
74	YPPFMTSTL	303	-0.3000	0
75	MRTDSTTLS	342	-0.3000	0
76	ITLDEALKI	828	-0.3000	0
77	YVTEILPEP	730	-0.3500	0
78	IGRPSTYSS	530	-0.4000	0
79	IVAREGRFG	720	-0.4000	0
80	FGPYVTEIL	727	-0.4000	0
81	LVTEDQIFT	819	-0.4000	0
82	LLADRRARG	903	-0.4000	0
83	YKSQPWARL	62	-0.5000	0
84	LAKLDASVS	221	-0.5000	0
85	LDIVELTPD	498	-0.5000	0
86	MDLQVTLE	769	-0.5000	0
87	LQVTLEDA	771	-0.5000	0
88	FGPYVTDGE	873	-0.5000	0

ALLELE: DRB1_1322		Threshold for 3 % with score: 1.8	Highest Score achievable by any peptide: 8.4	
Rank	Sequence	At Position	Score	% of Highest Score
1	MVIKDGRFG	866	3.9000	46.43
2	LIWQRTVAS	421	3.1000	36.90
3	IRDLPRAAS	48	3.0000	35.71
4	LVPSWVAFA	556	3.0000	35.71
5	MVFHEITEP	135	2.9000	34.52
6	FRLYELIWQ	416	2.8000	33.33
7	VLWKKVAPK	180	2.7000	32.14
8	LRLLSLPRV	780	2.6000	30.95
9	YTRKVKNAQ	377	2.4000	28.57
10	LRSMDLQTV	766	2.3000	27.38
11	VQSVATRII	194	2.2000	26.19
12	LVIVESPTK	19	1.8000	21.43

13	LRFSAERTM	319	1.8000	21.43
14	IWQRTVASQ	422	1.8000	21.43
15	IVAREGRFG	720	1.8000	21.43
16	VKKRQKAAG	749	1.6000	19.05
17	LLSLPRVVG	782	1.5000	17.86
18	IVARERDRM	202	1.4000	16.67
19	MRTDSTTLS	342	1.4000	16.67
20	LEQHFGRLV	569	1.4000	16.67
21	WDILAKLDA	218	1.3000	15.48
22	YITYMRTDS	338	1.3000	15.48
23	YGPYLKRG	806	1.3000	15.48
24	IYAEPKRRG	836	1.3000	15.48
25	VKRMVFHEI	132	1.2000	14.29
26	WVAVAVTGL	560	1.2000	14.29
27	IISPEKRST	83	1.1000	13.10
28	WHLLETLPK	120	1.1000	13.10
29	LYGYEVSPV	172	1.1000	13.10
30	LKPRIPVKR	126	1.0000	11.90
31	VDAQETRRI	160	1.0000	11.90
32	IGRPSTYSS	530	1.0000	11.90
33	YVRVGKNGP	655	1.0000	11.90
34	LRGLLDVD	95	0.9000	10.71
35	LETLPKPRIP	123	0.9000	10.71
36	MSIAQRLYE	327	0.9000	10.71
37	LSLRITGMS	439	0.9000	10.71
38	LEDALRLLS	776	0.9000	10.71
39	VVGVDPASG	788	0.9000	10.71
40	LRITGMSGH	441	0.8800	10.48
41	VHKKGSALV	549	0.8000	9.52
42	LQVAEELFA	694	0.7000	8.33
43	LRELGTDP	853	0.7000	8.33
44	YIVESSRGH	39	0.6800	8.10
45	VAGRRVATG	245	0.6000	7.14
46	LVGINLEGI	627	0.6000	7.14

47	LGSGYIVES	35	0.5000	5.95
48	VFSATGRTL	453	0.5000	5.95
49	WKKVAPKLS	182	0.4000	4.76
50	IIVARERDR	201	0.4000	4.76
51	VVFSATGRT	452	0.4000	4.76
52	IVELTPDGH	500	0.3800	4.52
53	LYIISPEKR	81	0.3000	3.57
54	YIISPEKRS	82	0.3000	3.57
55	YEVSPVLWK	175	0.3000	3.57
56	YVAPAPRQY	369	0.3000	3.57
57	VPSWVAFVAV	557	0.3000	3.57
58	LAKLDASVS	221	0.2000	2.38
59	LQQEASRKL	311	0.2000	2.38
60	INAARTQAR	354	0.2000	2.38
61	IRPAGETFA	391	0.2000	2.38
62	VKALEELGI	522	0.2000	2.38
63	LEGIDAREV	632	0.2000	2.38
64	ILPEPAADA	734	0.2000	2.38
65	VIVESPTKA	20	0.1000	1.19
66	IVESPTKAR	21	0.1000	1.19
67	IRAAAEHPR	145	0.1000	1.19
68	FRSAAYWDI	212	0.1000	1.19
69	FPGFLKAYV	463	0.1000	1.19
70	ITAQNGRYG	799	0.1000	1.19
71	LKIYAEPKR	834	0.1000	1.19
72	MTLSLRITG	437	-0.1000	0
73	LTPGQRLDI	492	-0.1000	0
74	IDAREVNSI	635	-0.1000	0
75	IYVRVGKNG	654	-0.1000	0
76	VAREGRFGP	721	-0.1000	0
77	IPVKRMVFH	130	-0.1200	0
78	VESPTKARK	22	-0.2000	0
79	VATRIIVAR	197	-0.2000	0
80	WARLGVNVD	67	-0.3000	0



81	IAWHLLETL	118	-0.3000	0
82	VFHEITEPA	136	-0.3000	0
83	FSARLTAVA	238	-0.3000	0
84	ITYMRTDST	339	-0.3000	0
85	VAPAPRQYT	370	-0.3000	0
86	YELIWQRTV	419	-0.3000	0
87	ITLDEALKI	828	-0.3000	0
88	LTLQVAEEL	692	-0.4000	0
89	LSLPRVVG	783	-0.4000	0

ALLELE: DRB1_1323		Threshold for 3 % with score: 1.3	Highest Score achievable by any peptide: 8.4	
Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	3.8000	45.24
2	YTRKVKNAQ	377	3.4000	40.48
3	MVIKDGRFG	866	2.9000	34.52
4	WDILAKLDA	218	2.3000	27.38
5	YITYMRTDS	338	2.3000	27.38
6	YGPYLKRG	806	2.3000	27.38
7	WVAFVTGL	560	2.2000	26.19
8	WHLLETLKP	120	2.1000	25.00
9	LIWQRTVAS	421	2.1000	25.00
10	IRDLPRAAS	48	2.0000	23.81
11	LVPSWVFA	556	2.0000	23.81
12	YVRVGKNGP	655	2.0000	23.81
13	MVFHEITEP	135	1.9000	22.62
14	VLWKKVAPK	180	1.7000	20.24
15	YIVESSRGH	39	1.6800	20.00
16	LRLSLPRV	780	1.6000	19.05
17	WKKVAPKLS	182	1.4000	16.67
18	YIISPEKRS	82	1.3000	15.48
19	YEVSPVLWK	175	1.3000	15.48
20	YVAPAPRQY	369	1.3000	15.48

21	LRSMDLQTV	766	1.3000	15.48
22	VQSVATRII	194	1.2000	14.29
23	FRSAAYWDI	212	1.1000	13.10
24	FPGFLKAYV	463	1.1000	13.10
25	LVIVESPTK	19	0.8000	9.52
26	LRFSAERTM	319	0.8000	9.52
27	IWQRTVASQ	422	0.8000	9.52
28	IVAREGRFG	720	0.8000	9.52
29	WARLGVNVD	67	0.7000	8.33
30	FSARLTAVA	238	0.7000	8.33
31	YELIWQRTV	419	0.7000	8.33
32	VKKRQKAAG	749	0.6000	7.14
33	FLKAYVETV	466	0.5000	5.95
34	YVHKKGSAL	548	0.5000	5.95
35	FAVTGLLEQ	563	0.5000	5.95
36	LLSLPRVVG	782	0.5000	5.95
37	IVARERDRM	202	0.4000	4.76
38	MRTDSTTLS	342	0.4000	4.76
39	LEQHFGRLV	569	0.4000	4.76
40	IYAEPKRRG	836	0.3000	3.57
41	VKRMVFHEI	132	0.2000	2.38
42	FDSLGTLRK	256	0.2000	2.38
43	YSSIIKTIQ	536	0.2000	2.38
44	IISPEKRST	83	0.1000	1.19
45	LYGYEVSPV	172	0.1000	1.19
46	LRGLLDVD	95	-0.1000	0
47	LETLKPRIP	123	-0.1000	0
48	MSIAQRLYE	327	-0.1000	0
49	LSLRITGMS	439	-0.1000	0
50	LEDALRLLS	776	-0.1000	0
51	VVGVDPASG	788	-0.1000	0
52	LRITGMSGH	441	-0.1200	0
53	VHKKGSALV	549	-0.2000	0
54	WLNNFYFGG	602	-0.2000	0

55	FEPLYIISP	78	-0.3000	0
56	LQVAEELFA	694	-0.3000	0
57	LRELGTDPA	853	-0.3000	0
58	VAGRRVATG	245	-0.4000	0
59	LVGINLEGI	627	-0.4000	0
60	LGSGYIVES	35	-0.5000	0
61	YKSQPWARL	62	-0.5000	0
62	YPPFMTSTL	303	-0.5000	0
63	WQRTVASQM	423	-0.5000	0
64	VFSATGRTL	453	-0.5000	0
65	YLERLVAGD	664	-0.5000	0
66	IIVARERDR	201	-0.6000	0
67	VVFSATGRT	452	-0.6000	0
68	YVTEILPEP	730	-0.6000	0
69	IVELTPDGH	500	-0.6200	0
70	LYIISPEKR	81	-0.7000	0
71	YGDEYVAPA	365	-0.7000	0
72	VPSWVAFVAV	557	-0.7000	0
73	LAKLDASVS	221	-0.8000	0
74	LQQEASRKL	311	-0.8000	0
75	INAARTQAR	354	-0.8000	0
76	IRPAGETFA	391	-0.8000	0
77	VKALEELGI	522	-0.8000	0
78	LEGIDAREV	632	-0.8000	0
79	ILPEPAADA	734	-0.8000	0
80	VIVESPTKA	20	-0.9000	0
81	IVESPTKAR	21	-0.9000	0
82	IRAAAEHPR	145	-0.9000	0
83	FSAERTMSI	321	-0.9000	0
84	ITAQNGRYG	799	-0.9000	0
85	LKIYAEPKR	834	-0.9000	0
86	VAPKLSAGR	185	-1.0000	0
87	MAFRSAAYW	210	-1.0000	0
88	VIKDGRFGP	867	-1.0000	0

ALLELE: DRB1_1327	Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 8.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	MVIKDGRFG	866	5.3000	60.23
2	MVFHEITEP	135	3.9000	44.32
3	LRLSLPRV	780	3.6000	40.91
4	LIWQRTVAS	421	3.5000	39.77
5	IRDLPRAAS	48	3.4000	38.64
6	LRFSAERTM	319	3.3000	37.50
7	LRSMDLQTV	766	3.3000	37.50
8	IVAREGRFG	720	3.2000	36.36
9	VQSVATRII	194	3.1000	35.23
10	LVPSWVAFA	556	3.0000	34.09
11	VKKRQKAAG	749	3.0000	34.09
12	IVARERDRM	202	2.9000	32.95
13	LLSLPRVVG	782	2.9000	32.95
14	VLWKKVAPK	180	2.8000	31.82
15	IYAEPKRRG	836	2.7000	30.68
16	LKPRIPVKR	126	2.5000	28.41
17	LEQHFGRVLV	569	2.4000	27.27
18	MSIAQRLYE	327	2.3000	26.14
19	VVGVDPASG	788	2.3000	26.14
20	WVAFAVTGL	560	2.1600	24.55
21	WHLLETLPK	120	2.1000	23.86
22	VKRMVFHEI	132	2.1000	23.86
23	LYGYEVSPV	172	2.1000	23.86
24	FRLYELIWQ	416	2.1000	23.86
25	YGPYLKRGV	806	2.1000	23.86
26	LRGLLDVD	95	2.0000	22.73
27	VAGRRVATG	245	2.0000	22.73
28	YVRVGKNGP	655	2.0000	22.73
29	LVIVESPTK	19	1.9000	21.59
30	LETLPKPRIP	123	1.9000	21.59

31	VDAQETRRI	160	1.9000	21.59
32	IIVARERDR	201	1.9000	21.59
33	LYIISPEKR	81	1.8000	20.45
34	IISPEKRST	83	1.8000	20.45
35	MRTDSTTLS	342	1.8000	20.45
36	VHKKGSALV	549	1.8000	20.45
37	YITYMRTDS	338	1.7000	19.32
38	INAARTQAR	354	1.7000	19.32
39	YTRKVKNAQ	377	1.7000	19.32
40	IVESPTKAR	21	1.6000	18.18
41	IRAAAEHPR	145	1.6000	18.18
42	YVAPAPRQY	369	1.6000	18.18
43	LKIYAEPKR	834	1.6000	18.18
44	VAPKLSAGR	185	1.5000	17.05
45	LVGINLEGI	627	1.5000	17.05
46	ITAQNGRYG	799	1.5000	17.05
47	VFSATGRTL	453	1.4600	16.59
48	IGRPSTYSS	530	1.4000	15.91
49	VATRIIVAR	197	1.3000	14.77
50	WDILAKLDA	218	1.3000	14.77
51	MTLSLRITG	437	1.3000	14.77
52	LSLRITGMS	439	1.3000	14.77
53	VPSWVAFAV	557	1.3000	14.77
54	IYVRVGKNG	654	1.3000	14.77
55	LEDALRLLS	776	1.3000	14.77
56	LEGIDAREV	632	1.2000	13.64
57	LQQEASRKL	311	1.1600	13.18
58	IWQRTVASQ	422	1.1000	12.50
59	VVFSATGRT	452	1.1000	12.50
60	FPGFLKAYV	463	1.1000	12.50
61	VKALEELGI	522	1.1000	12.50
62	FRSAAYWDI	212	1.0000	11.36
63	VIKDGRFGP	867	1.0000	11.36
64	LLADRRARG	903	1.0000	11.36

65	LGSGYIVES	35	0.9000	10.23
66	VAREGRFGP	721	0.9000	10.23
67	WARLGVNVD	67	0.8000	9.09
68	WKKVAPKLS	182	0.8000	9.09
69	MSGHQEVVF	446	0.8000	9.09
70	LTPGQRLDI	492	0.8000	9.09
71	IDAREVNSI	635	0.8000	9.09
72	VPAKKAAGR	924	0.8000	9.09
73	YIISPEKRS	82	0.7000	7.95
74	YELIWQRTV	419	0.7000	7.95
75	LQVAEELFA	694	0.7000	7.95
76	LRELGTDPA	853	0.7000	7.95
77	IAWHLLETL	118	0.6600	7.50
78	LAKLDASVS	221	0.6000	6.82
79	VNSIKLFDD	640	0.6000	6.82
80	VGKNGPYLE	658	0.6000	6.82
81	LSLPRVVG	783	0.6000	6.82
82	ITLDEALKI	828	0.6000	6.82
83	LTLQVAEEL	692	0.5600	6.36
84	FLKAYVETV	466	0.5000	5.68
85	YVHKKGSAL	548	0.4600	5.23
86	IVESSRGI	40	0.4000	4.55
87	VPAKYKSQP	58	0.4000	4.55
88	YEVSPVLWK	175	0.4000	4.55
89	LGTLRKGDE	259	0.4000	4.55
90	ITYMRTDST	339	0.4000	4.55
91	VAPAPRQYT	370	0.4000	4.55
92	LGIGRPSTY	528	0.4000	4.55
93	INLEGIDAR	630	0.4000	4.55

ALLELE: DRB1_1328	Threshold for 3 % with score: 2.6	Highest Score achievable by any peptide: 8.8		
Rank	Sequence	At Position	Score	% of Highest Score

1	MVIKDGRFG	866	5.3000	60.23
2	MVFHEITEP	135	3.9000	44.32
3	LRLSLPRV	780	3.6000	40.91
4	LIWQRTVAS	421	3.5000	39.77
5	IRDLPRAAS	48	3.4000	38.64
6	LRFSAERTM	319	3.3000	37.50
7	LRSMDLQTV	766	3.3000	37.50
8	IVAREGRFG	720	3.2000	36.36
9	VQSVATRII	194	3.1000	35.23
10	LVPSWVAFA	556	3.0000	34.09
11	VKKRQKAAG	749	3.0000	34.09
12	IVARERDRM	202	2.9000	32.95
13	LLSLPRVVG	782	2.9000	32.95
14	VLWKKVAPK	180	2.8000	31.82
15	IYAEPKRRG	836	2.7000	30.68
16	LKPRIPVKR	126	2.5000	28.41
17	LEQHFGRLV	569	2.4000	27.27
18	MSIAQRLYE	327	2.3000	26.14
19	VVGVDPASG	788	2.3000	26.14
20	WVAFAVTGL	560	2.1600	24.55
21	WHLLETLPK	120	2.1000	23.86
22	VKRMVFHEI	132	2.1000	23.86
23	LYGYEVSPV	172	2.1000	23.86
24	FRLYELIWQ	416	2.1000	23.86
25	YGPYLKRGV	806	2.1000	23.86
26	LRGLLDVD	95	2.0000	22.73
27	VAGRRVATG	245	2.0000	22.73
28	YVRVGKNGP	655	2.0000	22.73
29	LVIVESPTK	19	1.9000	21.59
30	LETLPKPRIP	123	1.9000	21.59
31	VDAQETRRI	160	1.9000	21.59
32	IIVARERDR	201	1.9000	21.59
33	LYIISPEKR	81	1.8000	20.45
34	IISPEKRST	83	1.8000	20.45

35	MRTDSTTLS	342	1.8000	20.45
36	VHKKGSALV	549	1.8000	20.45
37	YITYMRTDS	338	1.7000	19.32
38	INAARTQAR	354	1.7000	19.32
39	YTRKVKNAQ	377	1.7000	19.32
40	IVESPTKAR	21	1.6000	18.18
41	IRAAAEHPR	145	1.6000	18.18
42	YVAPAPRQY	369	1.6000	18.18
43	LKIYAEPKR	834	1.6000	18.18
44	VAPKLSAGR	185	1.5000	17.05
45	LVGINLEGI	627	1.5000	17.05
46	ITAQNGRYG	799	1.5000	17.05
47	VFSATGRTL	453	1.4600	16.59
48	IGRPSTYSS	530	1.4000	15.91
49	VATRIIVAR	197	1.3000	14.77
50	WDILAKLDA	218	1.3000	14.77
51	MTLSLRITG	437	1.3000	14.77
52	LSLRITGMS	439	1.3000	14.77
53	VPSWVAFAV	557	1.3000	14.77
54	IYVRVGKNG	654	1.3000	14.77
55	LEDALRLLS	776	1.3000	14.77
56	LEGIDAREV	632	1.2000	13.64
57	LQQEASRKL	311	1.1600	13.18
58	IWQRTVASQ	422	1.1000	12.50
59	VVFSATGRT	452	1.1000	12.50
60	FPGFLKAYV	463	1.1000	12.50
61	VKALEELGI	522	1.1000	12.50
62	FRSAAYWDI	212	1.0000	11.36
63	VIKDGRFGP	867	1.0000	11.36
64	LLADRRARG	903	1.0000	11.36
65	LGSGYIVES	35	0.9000	10.23
66	VAREGRFGP	721	0.9000	10.23
67	WARLGVNVD	67	0.8000	9.09
68	WKKVAPKLS	182	0.8000	9.09



69	MSGHQEVVF	446	0.8000	9.09
70	LTPGQRLDI	492	0.8000	9.09
71	IDAREVNSI	635	0.8000	9.09
72	VPAKKAAGR	924	0.8000	9.09
73	YIISPEKRS	82	0.7000	7.95
74	YELIWQRTV	419	0.7000	7.95
75	LQVAEELFA	694	0.7000	7.95
76	LRELGTDPA	853	0.7000	7.95
77	IAWHLLETL	118	0.6600	7.50
78	LAKLDASVS	221	0.6000	6.82
79	VNSIKLFDD	640	0.6000	6.82
80	VGKNGPYLE	658	0.6000	6.82
81	LSLPRVVG	783	0.6000	6.82
82	ITLDEALKI	828	0.6000	6.82
83	LTLQVAEEL	692	0.5600	6.36
84	FLKAYVETV	466	0.5000	5.68
85	YVHKKGSAL	548	0.4600	5.23
86	IVESSRGI	40	0.4000	4.55
87	VPAKYKSP	58	0.4000	4.55
88	YEVSPVLWK	175	0.4000	4.55
89	LGTLRKGDE	259	0.4000	4.55
90	ITYMRTDST	339	0.4000	4.55
91	VAPAPRQYT	370	0.4000	4.55
92	LGIGRPSTY	528	0.4000	4.55
93	INLEGIDAR	630	0.4000	4.55

ALLELE: DRB1_1501	Threshold for 3 % with score: 3.25	Highest Score achievable by any peptide: 9.8		
Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	4.8000	48.98
2	LRLLSLPRV	780	4.5000	45.92
3	LKKLVGINL	624	4.1000	41.84
4	LYGYEVSPV	172	3.9000	39.80

5	LTPGQRDI	492	3.9000	39.80
6	WVAFVAVTGL	560	3.9000	39.80
7	VKRMVFHEI	132	3.8000	38.78
8	LRSMDLQTV	766	3.6000	36.73
9	YITYMRTDS	338	3.5000	35.71
10	IKLFDDTHG	643	3.5000	35.71
11	LKIYAEPKR	834	3.4000	34.69
12	IVLDEGSAT	269	3.3000	33.67
13	VKALEELGI	522	3.2000	32.65
14	LVDYDFTAA	576	3.2000	32.65
15	ITLDEALKI	828	3.2000	32.65
16	MVFHEITEP	135	3.1500	32.14
17	FRSAAYWDI	212	3.1000	31.63
18	LVGINLEGI	627	3.1000	31.63
19	LVIVESPTK	19	3.0000	30.61
20	VTLEDALRL	774	2.8000	28.57
21	LRITGMSGH	441	2.7000	27.55
22	LLRSMDLQT	765	2.7000	27.55
23	IVARERDRM	202	2.6800	27.35
24	LASYLGSGY	31	2.6000	26.53
25	LQVAEELFA	694	2.6000	26.53
26	VRVGKNGPY	656	2.5000	25.51
27	MTLSLRITG	437	2.4000	24.49
28	VVFSATGRT	452	2.3600	24.08
29	IVESSRGI	40	2.3000	23.47
30	MSIAQRLYE	327	2.2000	22.45
31	LLSLPRVVG	782	2.2000	22.45
32	IRDLPRAAS	48	2.1000	21.43
33	LTFPGFLKA	461	2.1000	21.43
34	MVIKDGRFG	866	2.1000	21.43
35	WHLLETLPK	120	2.0600	21.02
36	FGPYVTEIL	727	2.0600	21.02
37	LVTEDQIFT	819	2.0000	20.41
38	VIKDGRFGP	867	2.0000	20.41

39	YPPFMTSTL	303	1.9600	20.00
40	YVHKKGSAL	548	1.9000	19.39
41	LRKGDEVIV	262	1.8000	18.37
42	YMRTDSTTL	341	1.8000	18.37
43	LVPSWVAFA	556	1.8000	18.37
44	VPSWVAFAV	557	1.8000	18.37
45	LRKGDDVAS	886	1.8000	18.37
46	VQSVATRII	194	1.7600	17.96
47	IRPAGETFA	391	1.7000	17.35
48	MRTDSTTLS	342	1.6600	16.94
49	LVGGEADDA	477	1.6000	16.33
50	VFSATGRTL	453	1.5000	15.31
51	LEQHFGRLV	569	1.5000	15.31
52	LNNFYFGGD	603	1.5000	15.31
53	IVAREGRFG	720	1.5000	15.31
54	VVGVDPASG	788	1.5000	15.31
55	LKDVDLYL	99	1.4000	14.29
56	LDRLYGYEV	169	1.4000	14.29
57	MADARGMTL	431	1.4000	14.29
58	VAREGRFGP	721	1.4000	14.29
59	LEDALRLLS	776	1.4000	14.29
60	LKRGNDERS	810	1.4000	14.29
61	WDILAKLDA	218	1.3000	13.27
62	WLNNFYFGG	602	1.3000	13.27
63	VNSIKLFDD	640	1.3000	13.27
64	YVRVGKNGP	655	1.3000	13.27
65	LRFAERTM	319	1.2800	13.06
66	IGRPSTYSS	530	1.2600	12.86
67	VAFVTGLL	561	1.2600	12.86
68	LQQEASRKL	311	1.2000	12.24
69	IDDFRLYEL	413	1.2000	12.24
70	LGIGRPSTY	528	1.2000	12.24
71	FYFGGDHGV	606	1.2000	12.24
72	LYIISPEKR	81	1.1000	11.22

73	IAWHLLETL	118	1.1000	11.22
74	YGYEVSPVL	173	1.1000	11.22
75	VIVLDEGSA	268	1.1000	11.22
76	FPGFLKAYV	463	1.1000	11.22
77	VARSGGLKK	618	1.1000	11.22
78	LERLVAGDT	665	1.1000	11.22
79	VIVESPTKA	20	1.0000	10.20
80	ISPEKRSTV	84	1.0000	10.20
81	VHKKGSALV	549	1.0000	10.20
82	IYVRVGKNG	654	1.0000	10.20
83	WQRTVASQM	423	0.9800	10.00
84	LVAGDTGEP	668	0.9600	9.80
85	LKAYVETVD	467	0.9000	9.18
86	LQTVTLEDA	771	0.9000	9.18
87	IFTITLDEA	825	0.9000	9.18
88	ITYMRTDST	339	0.8600	8.78
89	VNVDADFEP	72	0.8000	8.16
90	IRAAAEHPR	145	0.8000	8.16
91	VAPAPRQYT	370	0.8000	8.16
92	LLADRRARG	903	0.8000	8.16
93	LRELGTDPA	853	0.7600	7.76

ALLELE: DRB1_1502		Threshold for 3 % with score: 3.25	Highest Score achievable by any peptide: 9.8	
Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	5.8000	59.18
2	WVAFAVTGL	560	4.9000	50.00
3	YITYMRTDS	338	4.5000	45.92
4	FRSAAYWDI	212	4.1000	41.84
5	LRLLSLPRV	780	3.5000	35.71
6	LKKLVGINL	624	3.1000	31.63
7	WHLLETLKP	120	3.0600	31.22
8	FGPYVTEIL	727	3.0600	31.22

9	YPPFMTSTL	303	2.9600	30.20
10	LYGYEVSPV	172	2.9000	29.59
11	LTPGQRDI	492	2.9000	29.59
12	YVHKKGSAL	548	2.9000	29.59
13	VKRMVFHEI	132	2.8000	28.57
14	YMRTDSTTL	341	2.8000	28.57
15	LRSMDLQTV	766	2.6000	26.53
16	IKLFDDTHG	643	2.5000	25.51
17	LKIYAEPKR	834	2.4000	24.49
18	WDILAKLDA	218	2.3000	23.47
19	IVLDEGSAT	269	2.3000	23.47
20	WLNNFYFGG	602	2.3000	23.47
21	YVRVGKNGP	655	2.3000	23.47
22	VKALEELGI	522	2.2000	22.45
23	LVDYDFTAA	576	2.2000	22.45
24	FYFGGDHGV	606	2.2000	22.45
25	ITLDEALKI	828	2.2000	22.45
26	MVFHEITEP	135	2.1500	21.94
27	YGYEVSPVL	173	2.1000	21.43
28	FPGFLKAYV	463	2.1000	21.43
29	LVGINLEGI	627	2.1000	21.43
30	LVIVESPTK	19	2.0000	20.41
31	WQRTVASQM	423	1.9800	20.20
32	VTLEDALRL	774	1.8000	18.37
33	LRITGMSGH	441	1.7000	17.35
34	LLRSMDLQT	765	1.7000	17.35
35	IVARERDRM	202	1.6800	17.14
36	LASYLGSGY	31	1.6000	16.33
37	FGRLVDYDF	573	1.6000	16.33
38	LQVAEELFA	694	1.6000	16.33
39	VRVGKNGPY	656	1.5000	15.31
40	FSAERTMSI	321	1.4600	14.90
41	MTLSLRITG	437	1.4000	14.29
42	VVFSATGRT	452	1.3600	13.88

43	FEPLYIISP	78	1.3500	13.78
44	IVESSRGHI	40	1.3000	13.27
45	YGPYLKRGN	806	1.3000	13.27
46	YARRPYPPF	298	1.2000	12.24
47	MSIAQRLYE	327	1.2000	12.24
48	LLSLPRVVG	782	1.2000	12.24
49	IRDLPRAAS	48	1.1000	11.22
50	LTFPGFLKA	461	1.1000	11.22
51	MVIKDGRFG	866	1.1000	11.22
52	LVTEDQIFT	819	1.0000	10.20
53	VIKDGRFGP	867	1.0000	10.20
54	YENGYITYM	334	0.9300	9.49
55	YLGSGYIVE	34	0.9000	9.18
56	YVTEILPEP	730	0.9000	9.18
57	YVTDGETNA	876	0.9000	9.18
58	LRKGDEVIV	262	0.8000	8.16
59	LVPSWVAFA	556	0.8000	8.16
60	VPSWVAFAV	557	0.8000	8.16
61	LRKGDDVAS	886	0.8000	8.16
62	VQSVATRII	194	0.7600	7.76
63	YIISPEKRS	82	0.7000	7.14
64	IRPAGETFA	391	0.7000	7.14
65	YELIWQRTV	419	0.7000	7.14
66	FAVTGLLEQ	563	0.7000	7.14
67	MRTDSTTLS	342	0.6600	6.73
68	FGPYVTDGE	873	0.6600	6.73
69	YKSQPWARL	62	0.6000	6.12
70	LVGGEADDA	477	0.6000	6.12
71	FTITLDEAL	826	0.6000	6.12
72	WKKVAPKLS	182	0.5000	5.10
73	VFSATGRTL	453	0.5000	5.10
74	LEQHFGRLV	569	0.5000	5.10
75	LNNFYFGGD	603	0.5000	5.10
76	IVAREGRFG	720	0.5000	5.10

77	VVGVDPASG	788	0.5000	5.10
78	LKDVDLYL	99	0.4000	4.08
79	LDRLYGYEV	169	0.4000	4.08
80	MADARGMTL	431	0.4000	4.08
81	FSATGRTL	454	0.4000	4.08
82	VAREGRFGP	721	0.4000	4.08
83	LEDALRLS	776	0.4000	4.08
84	LKRGNDSRS	810	0.4000	4.08
85	FLKAYVETV	466	0.3000	3.06
86	VNSIKLFDD	640	0.3000	3.06
87	LRFAERTM	319	0.2800	2.86
88	IGRPSTYSS	530	0.2600	2.65
89	VAFVAVTGLL	561	0.2600	2.65
90	FHEITEPAI	137	0.2000	2.04
91	YEVSPVLWK	175	0.2000	2.04
92	LQQEASRKL	311	0.2000	2.04
93	YVAPAPRQY	369	0.2000	2.04

ALLELE: DRB1_1506		Threshold for 3 % with score: 3.1	Highest Score achievable by any peptide: 9.8	
Rank	Sequence	At Position	Score	% of Highest Score
1	FRLYELIWQ	416	4.8000	48.98
2	LRLLSLPRV	780	4.5000	45.92
3	LKKLVGINL	624	4.1000	41.84
4	LYGYEVSPV	172	3.9000	39.80
5	LTPGQRDI	492	3.9000	39.80
6	WVAFVAVTGL	560	3.9000	39.80
7	VKRMVFHEI	132	3.8000	38.78
8	LRSMDLQTV	766	3.6000	36.73
9	YITYMRTDS	338	3.5000	35.71
10	IKLFDDTHG	643	3.5000	35.71
11	LKIYAEPKR	834	3.4000	34.69
12	IVLDEGSAT	269	3.3000	33.67

13	VKALEELGI	522	3.2000	32.65
14	LVDYDFTAA	576	3.2000	32.65
15	ITLDEALKI	828	3.2000	32.65
16	MVFHEITEP	135	3.1500	32.14
17	FRSAAYWDI	212	3.1000	31.63
18	LVGINLEGI	627	3.1000	31.63
19	LVIVESPTK	19	3.0000	30.61
20	VTLEDALRL	774	2.8000	28.57
21	LRITGMSGH	441	2.7000	27.55
22	LLRSMDLQT	765	2.7000	27.55
23	IVARERDRM	202	2.6800	27.35
24	LASYLGSGY	31	2.6000	26.53
25	LQVAEELFA	694	2.6000	26.53
26	VRVGKNGPY	656	2.5000	25.51
27	MTLSLRITG	437	2.4000	24.49
28	VVFSATGRT	452	2.3600	24.08
29	IVESSRGIH	40	2.3000	23.47
30	MSIAQRLYE	327	2.2000	22.45
31	LLSLPRVVG	782	2.2000	22.45
32	IRDLPRAAS	48	2.1000	21.43
33	LTFPGFLKA	461	2.1000	21.43
34	MVIKDGRFG	866	2.1000	21.43
35	WHLLETLPK	120	2.0600	21.02
36	FGPYVTEIL	727	2.0600	21.02
37	LVTEDQIFT	819	2.0000	20.41
38	VIKDGRFGP	867	2.0000	20.41
39	YPPFMTSTL	303	1.9600	20.00
40	YVHKKGSAL	548	1.9000	19.39
41	LRKGDEVIV	262	1.8000	18.37
42	YMRTDSTTL	341	1.8000	18.37
43	LVPSWVAFA	556	1.8000	18.37
44	VPSWVAFAV	557	1.8000	18.37
45	LRKGDDVAS	886	1.8000	18.37
46	VQSVATRII	194	1.7600	17.96



47	IRPAGETFA	391	1.7000	17.35
48	MRTDSTTLS	342	1.6600	16.94
49	LVGGEADDA	477	1.6000	16.33
50	VFSATGRTL	453	1.5000	15.31
51	LEQHFGRLV	569	1.5000	15.31
52	LNNFYFGGD	603	1.5000	15.31
53	IVAREGRFG	720	1.5000	15.31
54	VVGVDPASG	788	1.5000	15.31
55	LKDVDLYL	99	1.4000	14.29
56	LDRLYGYEV	169	1.4000	14.29
57	MADARGMTL	431	1.4000	14.29
58	VAREGRFGP	721	1.4000	14.29
59	LEDALRLLS	776	1.4000	14.29
60	LKRGNDTRS	810	1.4000	14.29
61	WDILAKLDA	218	1.3000	13.27
62	WLNNFYFGG	602	1.3000	13.27
63	VNSIKLFDD	640	1.3000	13.27
64	YVRVGKNGP	655	1.3000	13.27
65	LRFAERTM	319	1.2800	13.06
66	IGRPSTYSS	530	1.2600	12.86
67	VAFAVTGLL	561	1.2600	12.86
68	LQQEASRKL	311	1.2000	12.24
69	IDDFRLYEL	413	1.2000	12.24
70	LGIGRPSTY	528	1.2000	12.24
71	FYFGGDHGV	606	1.2000	12.24
72	LYIISPEKR	81	1.1000	11.22
73	IAWHLLETL	118	1.1000	11.22
74	YGYEVSPVL	173	1.1000	11.22
75	VIVLDEGSA	268	1.1000	11.22
76	FPGFLKAYV	463	1.1000	11.22
77	VARSGLKK	618	1.1000	11.22
78	LERLVAGDT	665	1.1000	11.22
79	VIVESPTKA	20	1.0000	10.20
80	ISPEKRSTV	84	1.0000	10.20

81	VHKKGSALV	549	1.0000	10.20
82	IYVRVGKNG	654	1.0000	10.20
83	WQRTVASQM	423	0.9800	10.00
84	LVAGDTGEP	668	0.9600	9.80
85	LKAYVETVD	467	0.9000	9.18
86	LQTVTLEDA	771	0.9000	9.18
87	IFTITLDEA	825	0.9000	9.18
88	ITYMRTDST	339	0.8600	8.78
89	VNVDADFEP	72	0.8000	8.16
90	IRAAAEHPR	145	0.8000	8.16
91	VAPAPRQYT	370	0.8000	8.16
92	LLADRRARG	903	0.8000	8.16
93	LRELGTDPA	853	0.7600	7.76

ALLELE: DRB5_0101		Threshold for 3 % with score: 2.3	Highest Score achievable by any peptide: 9.8	
Rank	Sequence	At Position	Score	% of Highest Score
1	LVIVESPTK	19	5.3000	54.08
2	LYIISPEKR	81	4.5000	45.92
3	WKKVAPKLS	182	4.0000	40.82
4	FRLYELIWQ	416	3.5000	35.71
5	YVAPAPRQY	369	3.4000	34.69
6	VKRMVFHEI	132	3.2000	32.65
7	VQSVATRII	194	3.2000	32.65
8	YMRTDSTTL	341	3.2000	32.65
9	FRSAAYWDI	212	3.0000	30.61
10	VVGVDPASG	788	3.0000	30.61
11	IRAAAEHPR	145	2.9000	29.59
12	LKKLVGINL	624	2.9000	29.59
13	LPHLTPGQR	489	2.6000	26.53
14	LRSMDLQTV	766	2.6000	26.53
15	WQRTVASQM	423	2.5000	25.51
16	IIVARERDR	201	2.4000	24.49

17	LRITGMSGH	441	2.3000	23.47
18	VFSATGRTL	453	2.3000	23.47
19	MVIKDGRFG	866	2.3000	23.47
20	VESSRGHIR	41	2.2000	22.45
21	INAARTQAR	354	2.2000	22.45
22	FGRLVDYDF	573	2.2000	22.45
23	VARSGGLKK	618	2.2000	22.45
24	YIVESSRGH	39	2.1000	21.43
25	YEVSPVLWK	175	2.1000	21.43
26	YELIWQRTV	419	2.1000	21.43
27	YVRVGKNGP	655	2.1000	21.43
28	IVESPTKAR	21	2.0000	20.41
29	LYLATDGDR	105	2.0000	20.41
30	FDSLGTLRK	256	2.0000	20.41
31	IKTIQDRGY	540	2.0000	20.41
32	LVGINLEGI	627	1.9000	19.39
33	LFATPQQGR	700	1.9000	19.39
34	WVAVAVTGL	560	1.8000	18.37
35	YIISPEKRS	82	1.7000	17.35
36	LEGIDAREV	632	1.7000	17.35
37	WHLLETLKP	120	1.4000	14.29
38	YVHKKGSAL	548	1.4000	14.29
39	LTVASAEK	288	1.3000	13.27
40	LRFSAERTM	319	1.3000	13.27
41	ITGMSGHQE	443	1.2000	12.24
42	VSELRGLLK	92	1.1000	11.22
43	LKPRIPVKR	126	1.1000	11.22
44	FAVTGLLEQ	563	1.1000	11.22
45	LQQEASRKL	311	1.0000	10.20
46	VVFSATGRT	452	1.0000	10.20
47	LRLLSLPRV	780	1.0000	10.20
48	LTAVAGRRV	242	0.9000	9.18
49	VAFAVTGLL	561	0.9000	9.18
50	LKIYAEPKR	834	0.9000	9.18

51	LERLVAGDT	665	0.8000	8.16
52	IVAREGRFG	720	0.8000	8.16
53	FATPDAVRR	398	0.7000	7.14
54	LGIGRPSTY	528	0.7000	7.14
55	YSSIIKTIQ	536	0.7000	7.14
56	WLNNFYFGG	602	0.7000	7.14
57	VRVGKNGPY	656	0.7000	7.14
58	LVDAQETRR	159	0.6000	6.12
59	VTLEDALRL	774	0.6000	6.12
60	VKALEELGI	522	0.5000	5.10
61	LETLKPRIP	123	0.4000	4.08
62	YLGSGYIVE	34	0.3000	3.06
63	IDLVDAQET	157	0.3000	3.06
64	VNSIKLFDD	640	0.3000	3.06
65	YKSQPWARL	62	0.2000	2.04
66	YGYEVSPVL	173	0.2000	2.04
67	YITYMRTDS	338	0.2000	2.04
68	IVELTPDGH	500	0.2000	2.04
69	FTITLDEAL	826	0.2000	2.04
70	LAKLDASVS	221	0.1000	1.02
71	LGTDPASGK	856	0.1000	1.02
72	IVESSRGI	40	-0.1000	0
73	IRDLPRAAS	48	-0.1000	0
74	WDILAKLDA	218	-0.1000	0
75	FDDTHGRPI	646	-0.1000	0
76	ITLDEALKI	828	-0.1000	0
77	VIVESPTKA	20	-0.2000	0
78	LKDVDLYL	99	-0.2000	0
79	VIVLDEGSA	268	-0.2000	0
80	IRPAGETFA	391	-0.2000	0
81	MTLSLRITG	437	-0.2000	0
82	IGRPSTYSS	530	-0.2000	0
83	FGPYVTEIL	727	-0.2000	0
84	YAEPKRRGR	837	-0.2000	0

85	LDRLYGYEV	169	-0.3000	0
86	VLWKKVAPK	180	-0.3000	0
87	FMTSTLQQE	306	-0.3000	0
88	VTGLLEQHF	565	-0.3000	0
89	IYVRVGKNG	654	-0.3000	0
90	LTLQVAEEL	692	-0.3000	0

ALLELE: DRB5_0105	Threshold for 3 % with score: 2.3	Highest Score achievable by any peptide: 9.8
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Rank	Sequence	At Position	Score	% of Highest Score
1	LVIVESPTK	19	5.3000	54.08
2	LYIISPEKR	81	4.5000	45.92
3	WKKVAPKLS	182	4.0000	40.82
4	FRLYELIWQ	416	3.5000	35.71
5	YVAPAPRQY	369	3.4000	34.69
6	VKRMVFHEI	132	3.2000	32.65
7	VQSVATRII	194	3.2000	32.65
8	YMRTDSTTL	341	3.2000	32.65
9	FRSAAYWDI	212	3.0000	30.61
10	VVGVDPASG	788	3.0000	30.61
11	IRAAAEHPR	145	2.9000	29.59
12	LKKLVGINL	624	2.9000	29.59
13	LPHLTPGQR	489	2.6000	26.53
14	LRSMDLQTV	766	2.6000	26.53
15	WQRTVASQM	423	2.5000	25.51
16	IIVARERDR	201	2.4000	24.49
17	LRITGMSGH	441	2.3000	23.47
18	VFSATGRTL	453	2.3000	23.47
19	MVIKDGRFG	866	2.3000	23.47
20	VESSRGHIR	41	2.2000	22.45
21	INAARTQAR	354	2.2000	22.45
22	FGRLVDYDF	573	2.2000	22.45
23	VARSGGLKK	618	2.2000	22.45

24	YIVESSRGH	39	2.1000	21.43
25	YEVSPVLWK	175	2.1000	21.43
26	YELIWQRTV	419	2.1000	21.43
27	YVRVGKNGP	655	2.1000	21.43
28	IVESPTKAR	21	2.0000	20.41
29	LYLATDGDR	105	2.0000	20.41
30	FDSLGLTRK	256	2.0000	20.41
31	IKTIQDRGY	540	2.0000	20.41
32	LVGINLEGI	627	1.9000	19.39
33	LFATPQQGR	700	1.9000	19.39
34	WVAVAVTGL	560	1.8000	18.37
35	YIISPEKRS	82	1.7000	17.35
36	LEGIDAREV	632	1.7000	17.35
37	WHLLETLPK	120	1.4000	14.29
38	YVHKKGSAL	548	1.4000	14.29
39	LTVASAEK	288	1.3000	13.27
40	LRFSAERTM	319	1.3000	13.27
41	ITGMSGHQE	443	1.2000	12.24
42	VSELRGLLK	92	1.1000	11.22
43	LKPRIPVKR	126	1.1000	11.22
44	FAVTGLLEQ	563	1.1000	11.22
45	LQQEASRKL	311	1.0000	10.20
46	VVFSATGRT	452	1.0000	10.20
47	LRLLSLPRV	780	1.0000	10.20
48	LTAVAGRRV	242	0.9000	9.18
49	VAVAVTGLL	561	0.9000	9.18
50	LKIYAEPKR	834	0.9000	9.18
51	LERLVAGDT	665	0.8000	8.16
52	IVAREGRFG	720	0.8000	8.16
53	FATPDAVRR	398	0.7000	7.14
54	LGIGRPSTY	528	0.7000	7.14
55	YSSIIKTIQ	536	0.7000	7.14
56	WLNNFYFGG	602	0.7000	7.14
57	VRVGKNGPY	656	0.7000	7.14

58	LVDAQETRR	159	0.6000	6.12
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63	IDLVDAQET	157	0.3000	3.06
64	VNSIKLFDD	640	0.3000	3.06
65	YKSQPWARL	62	0.2000	2.04
66	YGYEVSPVL	173	0.2000	2.04
67	YITYMRTDS	338	0.2000	2.04
68	IVELTPDGH	500	0.2000	2.04
69	FTITLDEAL	826	0.2000	2.04
70	LAKLDASVS	221	0.1000	1.02
71	LGTDPASGK	856	0.1000	1.02
72	IVESSRghi	40	-0.1000	0
73	IRDLPRAAS	48	-0.1000	0
74	WDILAKLDA	218	-0.1000	0
75	FDDTHGRPI	646	-0.1000	0
76	ITLDEALKI	828	-0.1000	0
77	VIVESPTKA	20	-0.2000	0
78	LKDVDLYL	99	-0.2000	0
79	VIVLDEGSA	268	-0.2000	0
80	IRPAGETFA	391	-0.2000	0
81	MTLSLRITG	437	-0.2000	0
82	IGRPSTYSS	530	-0.2000	0
83	FGPYVTEIL	727	-0.2000	0
84	YAEPKRRGR	837	-0.2000	0
85	LDRLYGYEV	169	-0.3000	0
86	VLWKKVAPK	180	-0.3000	0
87	FMTSTLQQE	306	-0.3000	0
88	VTGLLEQHF	565	-0.3000	0
89	IYVRVGKNG	654	-0.3000	0
90	LTLQVAEEL	692	-0.3000	0

