



nHLAPred
A neural network based MHC Class-I Binding Peptide Prediction Server

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Antigen Name	Untitled
Scanned on	Fri Feb 12 19:55:54 2010
Length of input sequence	934 amino acids
Number of nonamers from input sequence	926
Threshold setting	.5
Number of alleles in query	67
Number of top scorers to be displayed	4
Number of top scorers to be displayed	4
Proteosome Filter	on at 5 threshold
ImmunoProteosome Filter	on at 5 threshold

ALLELE: HLA-A1				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	EADDAERRL	482	2.920
ANNs+QM	2	ITDERAAEL	896	0.890
ANNs+QM	3	ATDGDREGE	109	0.640
ANNs+QM	4	RSGGLKCLV	621	0.480

ALLELE: HLA-A2				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	SLVKALEEL	521	1.000
ANNs+QM	2	RTLTFPGFL	460	0.990

ANNs+QM	3	IAWHLLETL	119	0.940
ANNs+QM	4	YMRTDSTTL	342	0.830

ALLELE: HLA-A*0201				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	YMRTDSTTL	342	1.000
ANNs+QM	2	TLSESAINA	349	1.000
ANNs+QM	3	SLVKALEEL	521	1.000
ANNs+QM	4	FTAAMEDEL	582	1.000

ALLELE: HLA-A*0202				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	ILPEPAADA	735	0.990
ANNs+QM	2	TLEDALRL	776	0.990
ANNs+QM	3	KNGPYLERL	661	0.970
ANNs+QM	4	ASAPPLREL	849	0.960

ALLELE: HLA-A*0203				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	YMRTDSTTL	342	0.960
ANNs+QM	2	KARKLASYL	28	0.770
ANNs+QM	3	YKSQPWARL	63	0.750
ANNs+QM	4	SLVKALEEL	521	0.720

ALLELE: HLA-A*0206				
Threshold for .5 % with score: .5				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	GSALVPSWV	554	0.990
ANNs+QM	2	KNGPYLERL	661	0.990
ANNs+QM	3	AYWDILAKL	217	0.530
ANNs+QM	4	APPTFSARL	235	0.450

ALLELE: HLA-A*0205				
Threshold for 4 % with score: 5.950				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	APPTFSARL	235	12.690
QM	2	QTVTLEDAL	773	9.790
QM	3	ASAPPLREL	849	9.420
QM	4	KARKLASYL	28	9.130

ALLELE: HLA-A*1101				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RYTEASLVK	516	1.000
ANNs+QM	2	HGVPDSVAR	613	1.000
ANNs+QM	3	AAAAQGVKK	744	1.000
ANNs+QM	4	AIRPAGETF	391	0.640

ALLELE: HLA-A11				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RYTEASLVK	516	1.000

ANNs+QM	2	AAAAQGVKK	744	1.000
ANNs+QM	3	HGVPDSVAR	613	0.880
ANNs+QM	4	IVLDEGSAT	270	0.790

ALLELE: HLA-A24				
Threshold for 4 % with score: 7.670				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AYVETVDEL	470	10.750
QM	2	AYWDILAKL	217	10.370
QM	3	ASAPPLREL	849	10.100
QM	4	RVGKNGPYL	658	9.860

ALLELE: HLA-A*2402				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	AYWDILAKL	217	1.000
ANNs+QM	2	RTLTFPGFL	460	0.970
ANNs+QM	3	AYVETVDEL	470	0.910
ANNs+QM	4	RYTEASLVK	516	0.860

ALLELE: HLA-A3				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RYTEASLVK	516	1.000
ANNs+QM	2	TVSELRGLL	92	0.970
ANNs+QM	3	AKRPARKAA	914	0.900
ANNs+QM	4	TLSESAINA	349	0.850

ALLELE: HLA-A*3101				
Threshold for 4 % with score: -1.609				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	RYTEASLVK	516	-1.022
QM	2	AAELLADRR	901	-1.609
QM	3	SLVKALEEL	521	-2.526

ALLELE: HLA-A31				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	HGVPDSVAR	613	0.670
ANNs+QM	2	VASITDERA	893	0.630
ANNs+QM	3	DLQTVTLED	771	0.600
ANNs+QM	4	FTAAMEDEL	582	0.560

ALLELE: HLA-A*0301				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	AAAAQGVKK	744	0.990
ANNs+QM	2	AKLDASVSD	223	0.940
ANNs+QM	3	EKRSTVSEL	88	0.860
ANNs+QM	4	AKRPARKAA	914	0.820

ALLELE: HLA-A*3302				
Threshold for 4 % with score: -0.105				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	HGVPDSVAR	613	1.099
QM	2	AAELLADRR	901	1.099

QM	3	ESPTKARKL	24	0.405
QM	4	EVIVLDEGS	268	0.405

ALLELE: HLA-A68.1				
Threshold for 4 % with score: 1.609				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	IVLDEGSAT	270	2.079
QM	2	RVGKNGPYL	658	2.079
QM	3	AAAAQGVKK	744	1.792
QM	4	AAELLADRR	901	1.609

ALLELE: HLA-A20 Cattle				
Threshold for 4 % with score: 3.401				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	YKSQPWARL	63	6.215
QM	2	EKRSTVSEL	88	6.215
QM	3	RKGDEVIVL	264	6.215
QM	4	RKGDDVASI	888	5.704

ALLELE: HLA-A2.1				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	SLVKALEEL	521	1.000
ANNs+QM	2	ILPEPAADA	735	1.000
ANNs+QM	3	TLEDALRL	776	1.000
ANNs+QM	4	GSATALAAG	275	0.980

ALLELE: HLA-B14				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	SLVKALEEL	521	1.000
ANNs+QM	2	DSVARGGL	617	1.000
ANNs+QM	3	EDALRLLSL	778	1.000
ANNs+QM	4	ITDERAAEL	896	1.000

ALLELE: HLA-B*2702				
Threshold for 4 % with score: 0.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AREVNSIKL	638	4.094
QM	2	ARSGGLKKL	620	2.890
QM	3	RQSASAPPL	846	2.890
QM	4	GQRDLIVEL	496	1.792

ALLELE: HLA-B27				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	ARSGGLKKL	620	1.000
ANNs+QM	2	AREVNSIKL	638	1.000
ANNs+QM	3	RTLTFPGFL	460	0.710
ANNs+QM	4	RKGDDVASI	888	0.250

ALLELE: HLA-B*2705				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	ARSGGLKKL	620	1.000

ANNs+QM	2	GQRLDIVEL	496	0.970
ANNs+QM	3	AREVNSIKL	638	0.730
ANNs+QM	4	ARKAARKVP	918	0.730

ALLELE: HLA-B*3501				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	APPTFSARL	235	1.000
ANNs+QM	2	TPDAVRREL	401	1.000
ANNs+QM	3	SPVLWKKVA	179	0.990
ANNs+QM	4	NPPARYTEA	512	0.910

ALLELE: HLA-B*3701				
Threshold for 4 % with score: 0.405				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TDERAAELL	897	5.298
QM	2	RDFDSLGLT	255	3.689
QM	3	LDEGSATAL	272	3.689
QM	4	SDSITPDEL	685	3.689

ALLELE: HLA-B*3801				
Threshold for 4 % with score: 0.445				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TPDAVRREL	401	2.054
QM	2	EADDAERRL	482	2.054
QM	3	TLEDALRLL	776	2.054
QM	4	AYWDILAKL	217	1.831

ALLELE: HLA-B*3901				
Threshold for 4 % with score: 1.792				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AREVNSIKL	638	3.807
QM	2	TLEDALRL	776	3.296
QM	3	ARSGGLKKL	620	3.114
QM	4	AYWDILAKL	217	2.890

ALLELE: HLA-B*3902				
Threshold for 4 % with score: 0.693				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	YKSQPWARL	63	2.996
QM	2	RKGDEVIVL	264	2.996
QM	3	LQQEASRKL	312	2.996
QM	4	RQSASAPPL	846	2.996

ALLELE: HLA-B*40				
Threshold for 4 % with score: 0.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TEILPEPAA	733	4.787
QM	2	TEASLVKAL	518	3.689
QM	3	DEGSATALA	273	2.996
QM	4	RDFDSLGL	255	2.303

ALLELE: HLA-B*4403				
Threshold for 4 % with score: 0.405				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TEASLVKAL	518	3.584

QM	2	DEGSATALA	273	3.296
QM	3	TEILPEPAA	733	2.996
QM	4	LDEGSATAL	272	0.523

ALLELE: HLA-B*5101				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	PARKAARKV	917	1.000
ANNs+QM	2	KARKLASYL	28	0.970
ANNs+QM	3	YMRTDSTTL	342	0.900
ANNs+QM	4	EADDAERRL	482	0.900

ALLELE: HLA-B*5102				
Threshold for 4 % with score: 9.050				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	VPDSVARSG	615	11.610
QM	2	PARKAARKV	917	10.300
QM	3	IAWHLLETTL	119	8.760
QM	4	TPDAVRREL	401	8.320

ALLELE: HLA-B*5103				
Threshold for 4 % with score: 9.280				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	VPDSVARSG	615	11.610
QM	2	PARKAARKV	917	10.300
QM	3	IAWHLLETTL	119	8.760
QM	4	TPDAVRREL	401	8.320

ALLELE: HLA-B*5201				
Threshold for 4 % with score: 1.974				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	SPVLWKKVA	179	1.982
QM	2	LQQEASRKL	312	1.782
QM	3	TPDAVRREL	401	1.569
QM	4	IAWHLLETL	119	1.289

ALLELE: HLA-B*5301				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	HPRDLIDIDL	152	1.000
ANNs+QM	2	APPTFSARL	235	1.000
ANNs+QM	3	SPVLWKKVA	179	0.940
ANNs+QM	4	LPEPAADAA	736	0.900

ALLELE: HLA-B*5401				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	HPRDLIDIDL	152	1.000
ANNs+QM	2	APPTFSARL	235	1.000
ANNs+QM	3	LPEPAADAA	736	1.000
ANNs+QM	4	EPAADAAAA	738	0.970

ALLELE: HLA-B*51				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	LWKKVAPKL	182	1.000

ANNs+QM	2	APPTFSARL	235	0.990
ANNs+QM	3	HPRDLIDL	152	0.980
ANNs+QM	4	SPVLWKKVA	179	0.970

ALLELE: HLA-B*5801				
Threshold for 4 % with score: -0.223				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	KARKLASYL	28	2.197
QM	2	RTLTFPGFL	460	2.197
QM	3	RSGGLKKLV	621	2.197
QM	4	ITDERAAEL	896	1.887

ALLELE: HLA-B60				
Threshold for 4 % with score: 1.386				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TEASLVKAL	518	5.864
QM	2	EDALRLLSL	778	4.382
QM	3	SDSITPDEL	685	3.689
QM	4	EDQIFTITL	823	3.689

ALLELE: HLA-B61				
Threshold for 4 % with score: 0.000				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TEILPEPAA	733	3.689
QM	2	DEGSATALA	273	2.996
QM	3	TEASLVKAL	518	2.773
QM	4	RDFDSLGTL	255	1.194

ALLELE: HLA-B62				
Threshold for 4 % with score: 0.693				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AIRPAGETF	391	3.679
QM	2	WQRTVASQM	424	3.178
QM	3	GQRLDIVEL	496	2.667
QM	4	LQQEASRKL	312	1.482

ALLELE: HLA-B7				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	HPRDLIDL	152	1.000
ANNs+QM	2	APPTFSARL	235	1.000
ANNs+QM	3	AIRPAGETF	391	1.000
ANNs+QM	4	TPDAVRREL	401	1.000

ALLELE: HLA-B*0702				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	HPRDLIDL	152	1.000
ANNs+QM	2	SPVLWKKVA	179	1.000
ANNs+QM	3	APPTFSARL	235	1.000
ANNs+QM	4	TPDAVRREL	401	1.000

ALLELE: HLA-B8				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	EADDAERRL	482	0.740

ANNs+QM	2	YWDILAKLD	218	0.730
ANNs+QM	3	VASITDERA	893	0.680
ANNs+QM	4	ESPTKARKL	24	0.670

ALLELE: HLA-Cw*0301				
Threshold for 4 % with score: 2.015				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AYVETVDEL	470	3.401
QM	2	VTLEDALRL	775	3.401
QM	3	RTLTFPGFL	460	2.996
QM	4	SLVKALEEL	521	2.996

ALLELE: HLA-Cw*0401				
Threshold for 4 % with score: 4.370				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	EADDAERRL	482	12.630
QM	2	APPTFSARL	235	8.030
QM	3	SLVKALEEL	521	7.700
QM	4	HPRDLIDL	152	7.040

ALLELE: HLA-Cw*0602				
Threshold for 4 % with score: 1.482				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	IAWHLLETL	119	2.676
QM	2	TEASLVKAL	518	2.580
QM	3	AYWDILAKL	217	2.485
QM	4	KARKLASYL	28	1.982

ALLELE: HLA-Cw*0702				
Threshold for 4 % with score: 1.212				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	AYWDILAKL	217	2.493
QM	2	APPTFSARL	235	1.974
QM	3	HPRDLIDIL	152	1.800
QM	4	TEASLVKAL	518	1.751

ALLELE: H2-Db				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	IAWHLLETL	119	1.000
ANNs+QM	2	RVGKNGPYL	658	1.000
ANNs+QM	3	QVTLEDAL	773	0.970
ANNs+QM	4	RSAAYWDIL	214	0.950

ALLELE: H2-Dd				
Threshold for 4 % with score: 11.800				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	PEPAADAAA	737	14.040
QM	2	SATALAAGL	276	13.970
QM	3	KNGPYLERL	661	13.240
QM	4	RKGDDVASI	888	13.000

ALLELE: H2-Kb				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	IAWHLLETL	119	1.000

ANNs+QM	2	APPTFSARL	235	1.000
ANNs+QM	3	EDQIFTITL	823	1.000
ANNs+QM	4	EADDAERRL	482	0.990

ALLELE: H2-Kd				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RTLTFPGFL	460	1.000
ANNs+QM	2	FTITLDEAL	827	1.000
ANNs+QM	3	ESPTKARKL	24	0.990
ANNs+QM	4	AYVETVDEL	470	0.990

ALLELE: H2-Kk				
Threshold for 4 % with score: 1.609				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TEASLVKAL	518	3.689
QM	2	DEGSATALA	273	2.996
QM	3	TEILPEPAA	733	2.996
QM	4	EDALRLLSL	778	2.079

ALLELE: H2-Ld				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RSAAYWDIL	214	1.000
ANNs+QM	2	TPDAVRREL	401	1.000
ANNs+QM	3	ASAPPLREL	849	1.000
ANNs+QM	4	HPRDLIDIL	152	0.930

ALLELE: HLA-G

Threshold for 4 % with score: 9.260

Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	ESPTKARKL	24	16.840
QM	2	VTLEDALRL	775	15.780
QM	3	ILPEPAADA	735	14.790
QM	4	TLEDALRLL	776	12.180

ALLELE: H-2Qa

Threshold for 4 % with score: 6.000

Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TEASLVKAL	518	9.470
QM	2	FTITLDEAL	827	7.780
QM	3	TLEDALRLL	776	6.630
QM	4	RQSASAPPL	846	6.170

ALLELE: HLA-B*2706

Threshold for 4 % with score: 5.000

Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	ARSGGLKKL	620	7.090
QM	2	SPVLWKKVA	179	7.000
QM	3	GQRLDIVEL	496	6.550
QM	4	RSGGLKCLV	621	6.530

ALLELE: HLA-B35

Threshold for 4 % with score: 8.350

Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	NVDADFEPL	74	15.140

QM	2	TPDAVRREL	401	14.470
QM	3	APPTFSARL	235	13.260
QM	4	ATGRDFDSL	252	10.360

ALLELE: Mamu-A*01				
Threshold for 4 % with score: 3.650				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	APPTFSARL	235	7.690
QM	2	FTITLDEAL	827	4.650
QM	3	NVDADFEPL	74	4.580
QM	4	VASITDERA	893	3.690

ALLELE: HLA-A*0204				
Threshold for 4 % with score: 12.070				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	LLSLPRVVG	783	18.360
QM	2	SLVKALEEL	521	17.520
QM	3	ILPEPAADA	735	17.100
QM	4	SDSITPDEL	685	15.990

ALLELE: HLA-B*2703				
Threshold for 4 % with score: 5.130				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	ARSGGLKKL	620	8.280
QM	2	GQRLDIVEL	496	6.430
QM	3	AREVNSIKL	638	6.330
QM	4	SLVKALEEL	521	3.540

ALLELE: HLA-B*2704				
Threshold for 4 % with score: 8.790				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	ARSGGLKKL	620	16.320
QM	2	AREVNSIKL	638	14.230
QM	3	APPTFSARL	235	11.470
QM	4	SLVKALEEL	521	11.080

ALLELE: HLA-B*2902				
Threshold for 4 % with score: 7.750				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TVSELRGLL	92	9.920
QM	2	PEPAADAAA	737	9.310
QM	3	PYVTDGETN	876	8.510
QM	4	TEASLVKAL	518	8.270

ALLELE: HLA-A*3301				
Threshold for 4 % with score: 3.840				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	RQSASAPPL	846	3.670
QM	2	ASAPPLREL	849	2.720
QM	3	RDFDSLGT	255	2.070
QM	4	HIRDLPRAA	48	1.850

ALLELE: HLA-B44				
Threshold for 4 % with score: 4.900				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
QM	1	TEILPEPAA	733	6.790

QM	2	PEPAADAAA	737	5.450
QM	3	DEGSATALA	273	5.410
QM	4	TEASLVKAL	518	4.840

ALLELE: HLA-A*6801				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	AAAAQGVKK	744	0.980
ANNs+QM	2	HGVPDSVAR	613	0.950
ANNs+QM	3	GSATALAAG	275	0.820
ANNs+QM	4	KKGSALVPS	552	0.780

ALLELE: HLA-A*6802				
Threshold for 4 % with score: 4				
Prediction method	Rank	Sequence	Residue No.	Peptide Score
ANNs+QM	1	RTLTFPGFL	460	1.000
ANNs+QM	2	QVTLEDAL	773	1.000
ANNs+QM	3	SLGTLRKGD	259	0.990
ANNs+QM	4	SGHQEVVFS	448	0.990