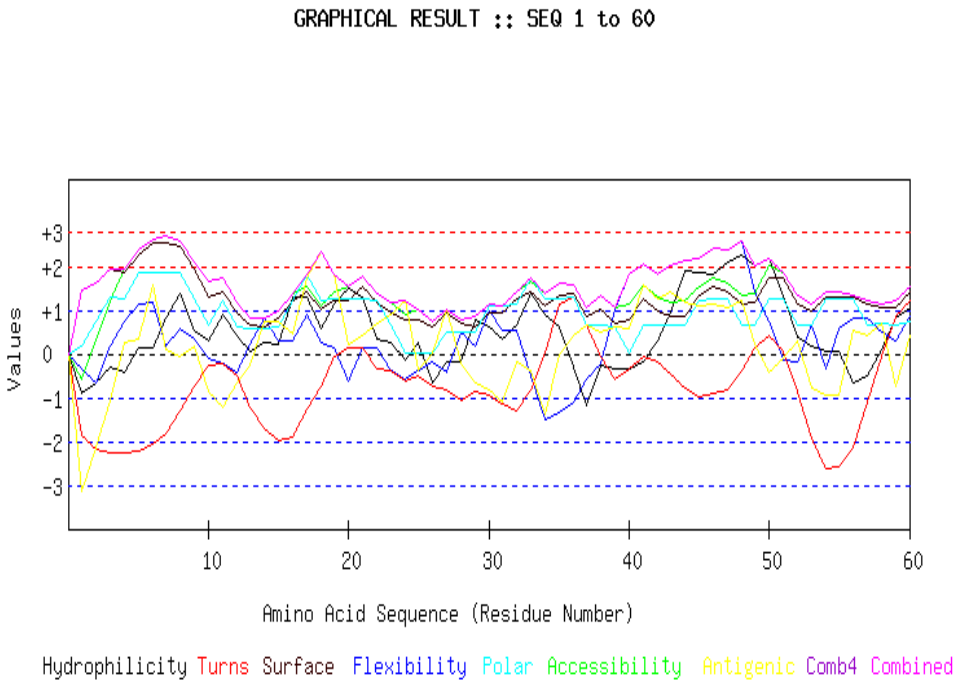
BcePred Prediction Server

The server displays 1.GRAPHICAL RESULT 2.TABULAR RESULT 3.Overlap Display

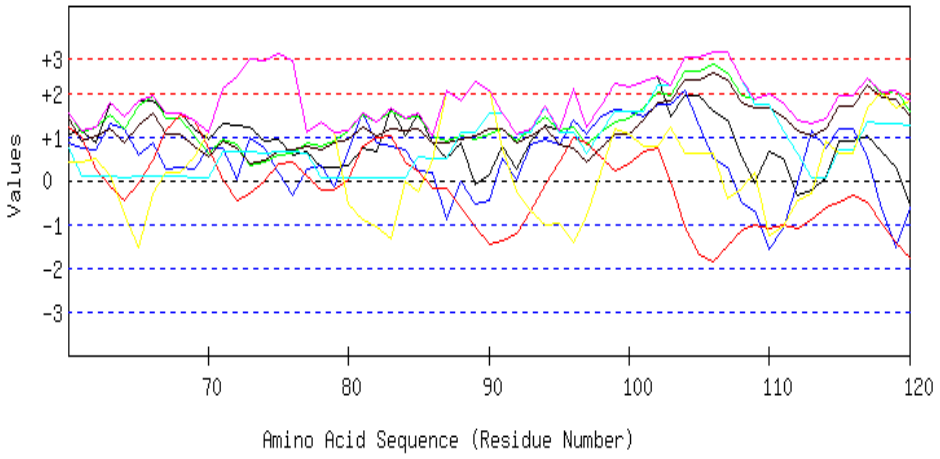
seqname=
Seq=MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPTANPCG
VCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTTAGFNALLKIVEEPP
EHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVYPLVIRAGGGSPRDTLSVLDQLL
AGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIESVIDGGHDPRRFATDLLERFRDLIVLQSVPDA
ASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQAGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQR
VERIETRLDMSIPAPQAVPRPSAAAAEPKHQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVM
LAGATVRALEDNTLVLTHESAPLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAK
AVNPAPTANSTQRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA

Length=578

**GRAPHICAL RESULT**

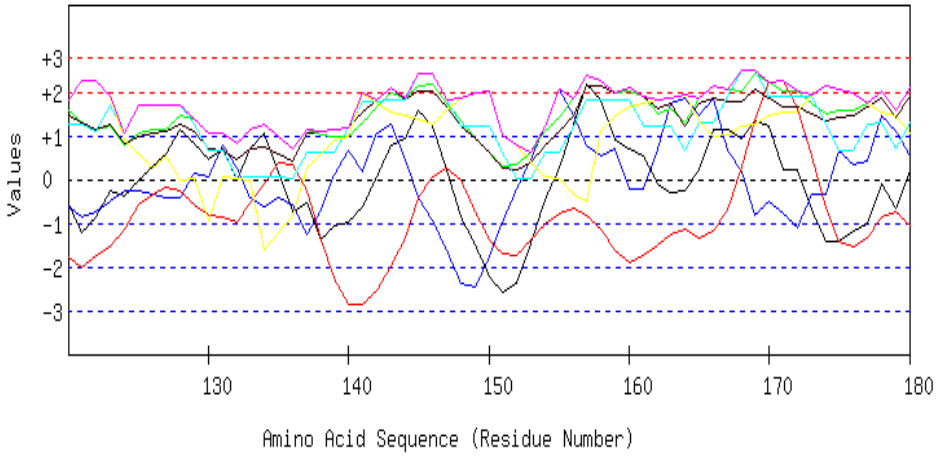


GRAPHICAL RESULT :: SEQ 61 to 120



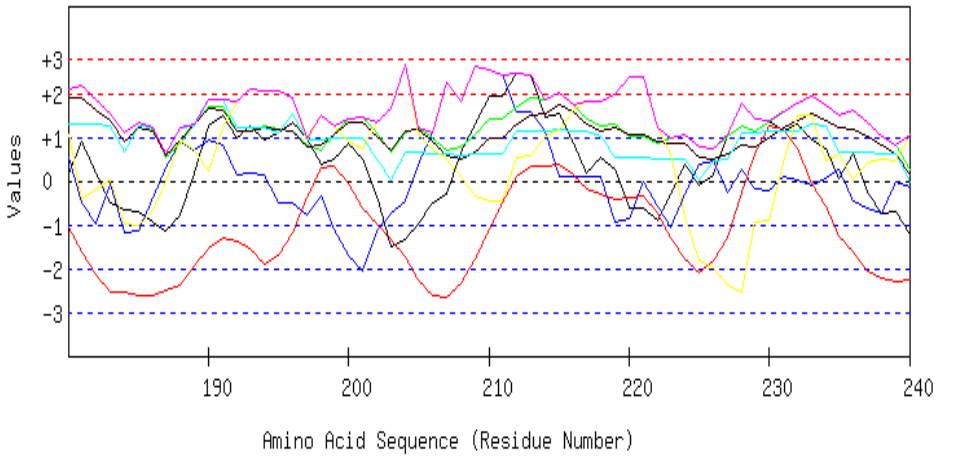

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 121 to 180



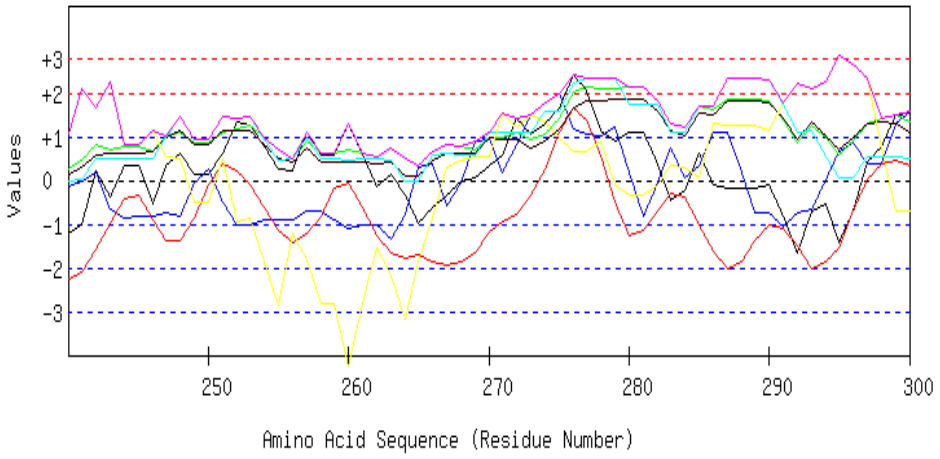

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 181 to 240



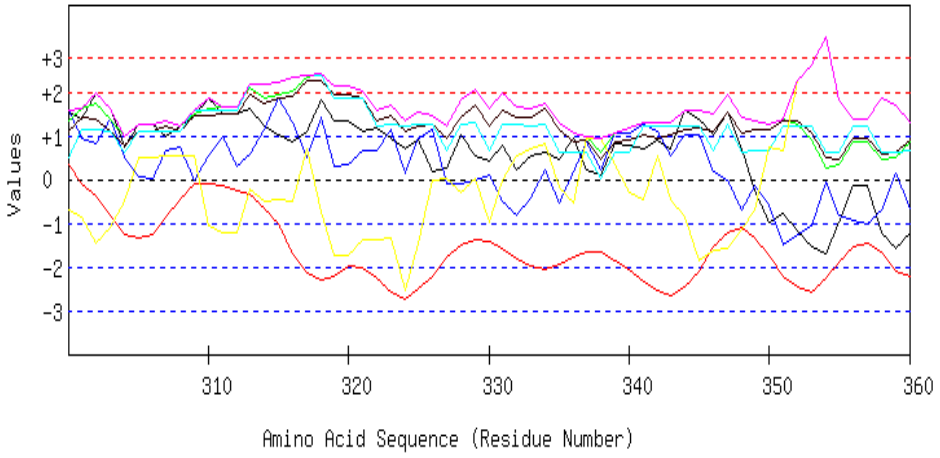

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 241 to 300



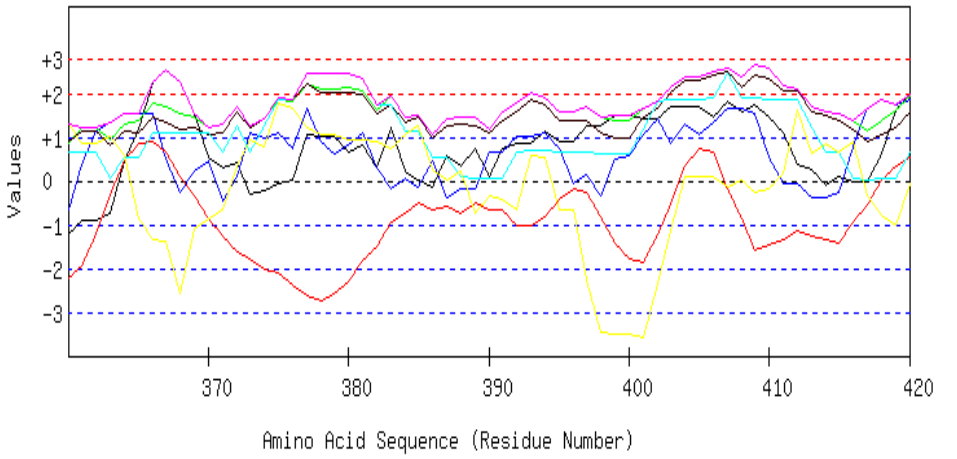

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 301 to 360



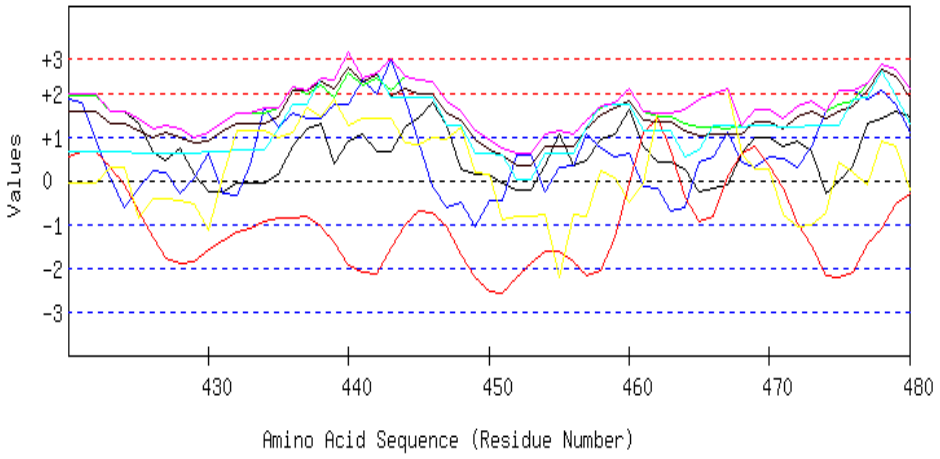

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 361 to 420



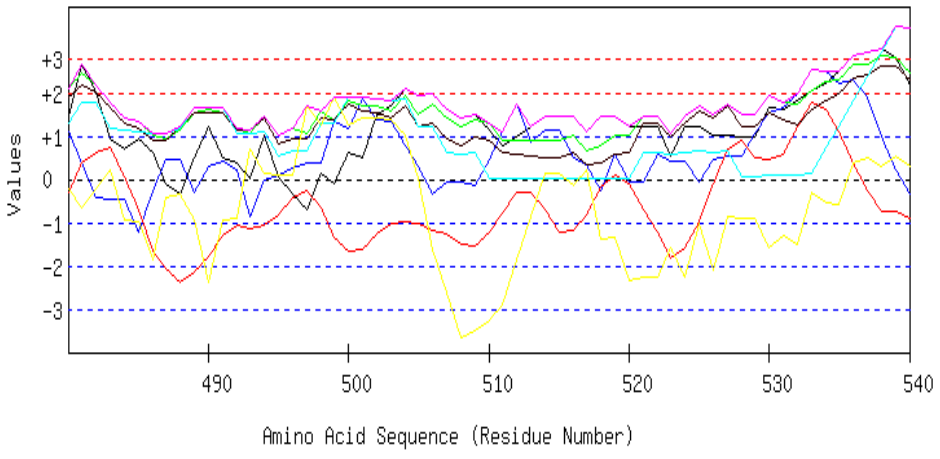

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 421 to 480



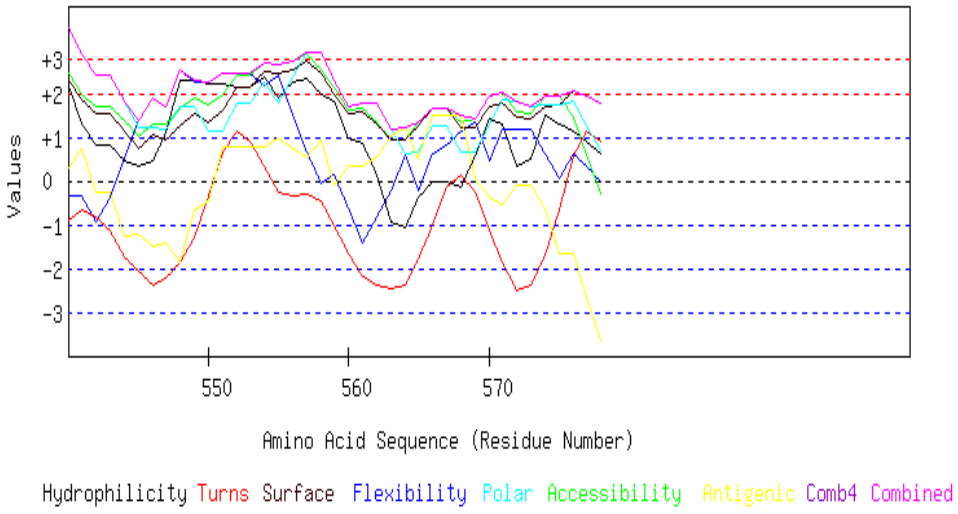

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 481 to 540




Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 541 to 600




TOP

---

---

**TABULAR RESULT**

**Selected Programs: hydro flexi access turns surface polar antipro**

**Respective Threshold: 1.9 2 1.9 2.4 2.3 1.8 1.9**

**MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLN
CAQGPTANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYR
VFIVDEAHMVTTAGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPR
TMRALLARICEQEGVVVDDAVYPLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGL
LGVTDVALIDDAVDALAACDAAALFGAIESVIDGGHDPRRFATDLLERFRDLIVLQSVPD
AASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQAGLGEMRGATAPRLLLEVVCARL
LLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPKHQPAREPRPVLAPTPA
SSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHESAPLARRLSEQ
RNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANSTQRDEE
EHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA**

Length=578

| A.A. | Parameter | | | | | | | Combined | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Hydro | Flexi | Access | Turns | Surface | Polar | AntiPro | MAX | MIN | AVG |
| 1 M | -0.913 | -0.354 | -0.569 | -1.850 | 1.449 | 0.192 | -3.147 | 1.449 | -3.147 | -0.742 |
| 2 A | -0.648 | -0.647 | 0.318 | -2.186 | 1.604 | 0.757 | -2.138 | 1.604 | -2.186 | -0.420 |
| 3 L | -0.288 | 0.167 | 1.225 | -2.268 | 1.923 | 1.291 | -1.062 | 1.923 | -2.268 | 0.141 |
| 4 Y | -0.408 | 0.730 | 1.935 | -2.257 | 1.841 | 1.250 | 0.280 | 1.935 | -2.257 | 0.482 |
| 5 R | 0.123 | 1.137 | 2.374 | -2.214 | 2.269 | 1.858 | 0.334 | 2.374 | -2.214 | 0.840 |
| 6 K | 0.123 | 1.179 | 2.617 | -2.050 | 2.543 | 1.877 | 1.564 | 2.617 | -2.050 | 1.122 |
| 7 Y | 0.838 | 0.173 | 2.702 | -1.828 | 2.533 | 1.871 | 0.119 | 2.702 | -1.828 | 0.915 |
| 8 R | 1.369 | 0.580 | 2.599 | -1.300 | 2.451 | 1.872 | -0.053 | 2.599 | -1.300 | 1.074 |
| 9 P | 0.522 | 0.341 | 2.103 | -0.746 | 1.932 | 1.252 | 0.199 | 2.103 | -0.746 | 0.800 |
| 10 A | 0.294 | -0.114 | 1.655 | -0.257 | 1.294 | 0.657 | -0.876 | 1.655 | -0.876 | 0.379 |
| 11 S | 0.907 | -0.210 | 1.730 | -0.215 | 1.422 | 1.237 | -1.235 | 1.730 | -1.235 | 0.519 |
| 12 F | 0.408 | -0.438 | 1.178 | -0.494 | 0.938 | 0.614 | -0.645 | 1.178 | -0.645 | 0.223 |
| 13 A | 0.041 | 0.227 | 0.814 | -1.202 | 0.656 | 0.597 | -0.276 | 0.814 | -1.202 | 0.122 |
| 14 E | 0.269 | 0.802 | 0.804 | -1.704 | 0.610 | 0.597 | 0.734 | 0.804 | -1.704 | 0.302 |
| 15 V | 0.237 | 0.317 | 0.982 | -1.964 | 0.829 | 0.619 | 0.738 | 0.982 | -1.964 | 0.251 |
| 16 V | 1.312 | 0.317 | 1.375 | -1.892 | 1.239 | 1.215 | 0.460 | 1.375 | -1.892 | 0.575 |
| 17 G | 1.312 | 0.904 | 1.533 | -1.267 | 1.412 | 1.834 | 1.738 | 1.834 | -1.267 | 1.067 |
| 18 Q | 0.585 | 0.277 | 1.085 | -0.721 | 1.039 | 1.236 | 2.353 | 2.353 | -0.721 | 0.836 |
| 19 E | 1.148 | 0.145 | 1.403 | -0.044 | 1.203 | 1.255 | 1.805 | 1.805 | -0.044 | 0.988 |
| 20 H | 1.514 | -0.635 | 1.524 | 0.154 | 1.212 | 1.253 | 0.206 | 1.524 | -0.635 | 0.747 |
| 21 V | 1.287 | 0.131 | 1.776 | 0.150 | 1.531 | 1.272 | 0.425 | 1.776 | 0.131 | 0.939 |
| 22 T | 0.326 | 0.131 | 1.365 | -0.341 | 1.166 | 1.235 | 0.697 | 1.365 | -0.341 | 0.654 |
| 23 A | 0.244 | -0.360 | 1.188 | -0.380 | 0.957 | 0.656 | 0.883 | 1.188 | -0.380 | 0.455 |
| 24 P | -0.123 | -0.564 | 0.907 | -0.624 | 0.774 | 0.037 | 1.205 | 1.205 | -0.624 | 0.230 |
| 25 L | 0.244 | -0.384 | 1.029 | -0.482 | 0.784 | 0.036 | -0.394 | 1.029 | -0.482 | 0.119 |
| 26 S | -0.667 | -0.180 | 0.748 | -0.758 | 0.638 | 0.021 | 0.000 | 0.748 | -0.758 | -0.028 |
| 27 V | -0.167 | -0.408 | 1.019 | -0.820 | 0.957 | 0.510 | 1.001 | 1.019 | -0.820 | 0.299 |
| 28 A | -0.167 | 0.501 | 0.776 | -1.066 | 0.683 | 0.491 | -0.229 | 0.776 | -1.066 | 0.141 |
| 29 L | 0.775 | 0.177 | 0.851 | -0.851 | 0.629 | 0.486 | -0.664 | 0.851 | -0.851 | 0.200 |
| 30 D | 0.629 | 0.990 | 1.132 | -0.920 | 0.948 | 1.090 | -0.824 | 1.132 | -0.920 | 0.435 |
| 31 A | 0.357 | 0.542 | 1.113 | -1.150 | 0.938 | 1.091 | -1.091 | 1.113 | -1.150 | 0.257 |
| 32 G | 0.667 | 0.542 | 1.412 | -1.294 | 1.248 | 1.131 | -0.194 | 1.412 | -1.294 | 0.502 |
| 33 R | 1.382 | -0.492 | 1.655 | -0.839 | 1.412 | 1.746 | -0.362 | 1.746 | -0.839 | 0.643 |
| 34 I | 0.882 | -1.510 | 1.384 | 0.033 | 1.093 | 1.257 | -1.363 | 1.384 | -1.510 | 0.254 |
| 35 N | 0.629 | -1.360 | 1.636 | 1.132 | 1.330 | 1.276 | -0.021 | 1.636 | -1.360 | 0.660 |
| 36 H | -0.313 | -1.113 | 1.561 | 1.315 | 1.385 | 1.282 | 0.414 | 1.561 | -1.113 | 0.647 |
| 37 A | -1.160 | -0.576 | 1.066 | 0.655 | 0.866 | 0.661 | 0.666 | 1.066 | -1.160 | 0.311 |
| 38 Y | -0.243 | -0.218 | 1.356 | -0.079 | 1.039 | 0.679 | 0.504 | 1.356 | -0.243 | 0.434 |
| 39 L | -0.325 | 1.002 | 1.047 | -0.560 | 0.683 | 0.639 | 0.617 | 1.047 | -0.560 | 0.443 |
| 40 F | -0.325 | 1.834 | 1.132 | -0.349 | 0.784 | 0.038 | 0.570 | 1.834 | -0.349 | 0.526 |
| 41 S | -0.193 | 2.044 | 1.561 | -0.077 | 1.257 | 0.663 | 1.579 | 2.044 | -0.193 | 0.976 |
| 42 G | 0.288 | 1.816 | 1.300 | -0.179 | 0.975 | 0.643 | 1.247 | 1.816 | -0.179 | 0.870 |
| 43 P | 0.958 | 2.020 | 1.169 | -0.465 | 0.875 | 0.656 | 1.435 | 2.020 | -0.465 | 0.950 |
| 44 R | 1.900 | 2.152 | 1.225 | -0.765 | 0.875 | 0.651 | 1.184 | 2.152 | -0.765 | 1.032 |
| 45 G | 1.849 | 2.194 | 1.524 | -0.980 | 1.358 | 1.226 | 1.089 | 2.194 | -0.980 | 1.180 |
| 46 C | 1.818 | 2.423 | 1.730 | -0.910 | 1.558 | 1.246 | 1.130 | 2.423 | -0.910 | 1.285 |
| 47 G | 2.096 | 2.387 | 1.636 | -0.815 | 1.440 | 1.247 | 1.069 | 2.387 | -0.815 | 1.294 |
| 48 K | 2.241 | 2.573 | 1.356 | -0.374 | 1.121 | 0.642 | 1.230 | 2.573 | -0.374 | 1.256 |
| 49 T | 2.014 | 1.417 | 1.365 | 0.145 | 1.166 | 0.642 | 0.220 | 2.014 | 0.145 | 0.996 |
| 50 S | 2.191 | 0.722 | 2.010 | 0.418 | 1.731 | 1.249 | -0.403 | 2.191 | -0.403 | 1.131 |
| 51 S | 1.325 | -0.134 | 1.879 | 0.070 | 1.759 | 1.251 | -0.082 | 1.879 | -0.134 | 0.867 |
| 52 A | 0.383 | -0.176 | 1.346 | -0.845 | 1.130 | 0.662 | 0.288 | 1.346 | -0.845 | 0.398 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 53 R | 0.187 | 0.680 | 1.150 | -1.923 | 0.975 | 0.642 | -0.763 | 1.150 | -1.923 | 0.135 |
| 54 I | 0.041 | -0.338 | 1.431 | -2.620 | 1.294 | 1.246 | -0.924 | 1.431 | -2.620 | 0.019 |
| 55 L | 0.041 | 0.596 | 1.431 | -2.564 | 1.294 | 1.246 | -0.924 | 1.431 | -2.564 | 0.160 |
| 56 A | -0.673 | 0.836 | 1.346 | -2.128 | 1.303 | 1.252 | 0.521 | 1.346 | -2.128 | 0.351 |
| 57 R | -0.496 | 0.836 | 1.216 | -1.096 | 1.139 | 0.668 | 0.409 | 1.216 | -1.096 | 0.382 |
| 58 S | 0.098 | 0.513 | 1.141 | -0.063 | 1.066 | 0.684 | 0.710 | 1.141 | -0.063 | 0.593 |
| 59 L | 0.813 | 0.285 | 1.225 | 0.854 | 1.057 | 0.678 | -0.735 | 1.225 | -0.735 | 0.597 |
| 60 N | 1.059 | 0.848 | 1.552 | 1.217 | 1.431 | 0.721 | 0.438 | 1.552 | 0.438 | 1.038 |
| 61 C | 1.154 | 0.730 | 1.113 | 0.988 | 0.911 | 0.096 | 0.439 | 1.154 | 0.096 | 0.776 |
| 62 A | 0.876 | 0.694 | 1.206 | 0.275 | 1.030 | 0.095 | 0.499 | 1.206 | 0.095 | 0.668 |
| 63 Q | 1.786 | 1.303 | 1.487 | -0.124 | 1.175 | 0.110 | 0.105 | 1.786 | -0.124 | 0.835 |
| 64 G | 1.476 | 1.171 | 1.188 | -0.442 | 0.866 | 0.069 | -0.792 | 1.476 | -0.792 | 0.505 |
| 65 P | 1.830 | 0.580 | 1.702 | -0.052 | 1.267 | 0.092 | -1.527 | 1.830 | -1.527 | 0.556 |
| 66 T | 1.830 | 0.848 | 1.945 | 0.479 | 1.540 | 0.111 | -0.297 | 1.945 | -0.297 | 0.922 |
| 67 A | 1.540 | 0.261 | 1.403 | 1.134 | 1.075 | 0.086 | 0.162 | 1.540 | 0.086 | 0.809 |
| 68 N | 1.540 | 0.297 | 1.403 | 1.519 | 1.075 | 0.086 | 0.162 | 1.540 | 0.086 | 0.869 |
| 69 P | 1.173 | 0.263 | 1.038 | 1.362 | 0.793 | 0.069 | 0.531 | 1.362 | 0.069 | 0.747 |
| 70 C | 0.933 | 0.760 | 0.627 | 0.737 | 0.547 | 0.067 | 1.112 | 1.112 | 0.067 | 0.683 |
| 71 G | 1.293 | 0.760 | 0.954 | 0.005 | 0.911 | 0.666 | 2.096 | 2.096 | 0.005 | 0.955 |
| 72 V | 1.261 | 0.037 | 0.804 | -0.454 | 0.756 | 0.646 | 2.369 | 2.369 | -0.454 | 0.774 |
| 73 C | 1.217 | 0.988 | 0.346 | -0.304 | 0.392 | 0.644 | 2.771 | 2.771 | -0.304 | 0.865 |
| 74 E | 0.895 | 0.748 | 0.440 | -0.005 | 0.474 | 0.628 | 2.738 | 2.738 | -0.005 | 0.845 |
| 75 S | 0.945 | 0.173 | 0.599 | 0.398 | 0.674 | 0.648 | 2.897 | 2.897 | 0.173 | 0.905 |
| 76 C | 0.598 | -0.324 | 0.636 | 0.432 | 0.692 | 0.652 | 2.743 | 2.743 | -0.324 | 0.776 |
| 77 V | 0.642 | 0.249 | 0.851 | 0.092 | 0.784 | 0.634 | 1.111 | 1.111 | 0.092 | 0.623 |
| 78 S | 0.281 | 0.345 | 0.767 | -0.236 | 0.692 | 0.054 | 1.357 | 1.357 | -0.236 | 0.466 |
| 79 L | 0.313 | -0.152 | 0.917 | -0.228 | 0.847 | 0.074 | 1.084 | 1.084 | -0.228 | 0.408 |
| 80 A | 0.357 | 0.680 | 1.132 | 0.017 | 0.938 | 0.056 | -0.548 | 1.132 | -0.548 | 0.376 |
| 81 P | 0.724 | 1.535 | 1.496 | 0.784 | 1.221 | 0.074 | -0.917 | 1.535 | -0.917 | 0.702 |
| 82 N | 0.673 | 0.852 | 1.337 | 0.970 | 1.020 | 0.054 | -1.076 | 1.337 | -1.076 | 0.547 |
| 83 A | 1.666 | 0.782 | 1.571 | 1.016 | 1.166 | 0.068 | -1.351 | 1.666 | -1.351 | 0.703 |
| 84 P | 1.028 | 0.686 | 1.431 | 0.433 | 1.148 | 0.070 | -0.020 | 1.431 | -0.020 | 0.682 |
| 85 G | 1.527 | 0.231 | 1.459 | 0.220 | 1.194 | 0.540 | -0.249 | 1.527 | -0.249 | 0.703 |
| 86 S | 0.850 | 0.179 | 1.038 | -0.180 | 0.875 | 0.501 | 0.453 | 1.038 | -0.180 | 0.531 |
| 87 I | 0.484 | -0.881 | 0.917 | -0.180 | 0.866 | 0.503 | 2.052 | 2.052 | -0.881 | 0.537 |
| 88 D | 0.844 | -0.017 | 1.001 | -0.609 | 0.957 | 1.083 | 1.806 | 1.806 | -0.609 | 0.723 |
| 89 V | -0.098 | -0.556 | 0.926 | -1.048 | 1.011 | 1.089 | 2.240 | 2.240 | -1.048 | 0.509 |
| 90 V | 0.123 | -0.460 | 1.047 | -1.442 | 1.175 | 1.558 | 2.072 | 2.072 | -1.442 | 0.582 |
| 91 E | 0.762 | 0.491 | 1.188 | -1.394 | 1.194 | 1.556 | 0.740 | 1.556 | -1.394 | 0.648 |
| 92 L | 0.263 | 0.007 | 0.917 | -1.208 | 0.875 | 1.067 | -0.261 | 1.067 | -1.208 | 0.237 |
| 93 D | 0.907 | 0.838 | 1.188 | -0.713 | 1.039 | 1.085 | -0.690 | 1.188 | -0.713 | 0.522 |
| 94 A | 1.274 | 0.926 | 1.468 | -0.097 | 1.221 | 1.704 | -1.012 | 1.704 | -1.012 | 0.784 |
| 95 A | 1.141 | 0.830 | 1.132 | 0.419 | 0.811 | 1.104 | -0.985 | 1.141 | -0.985 | 0.636 |
| 96 S | 2.083 | 1.369 | 1.206 | 0.975 | 0.756 | 1.099 | -1.420 | 2.083 | -1.420 | 0.867 |
| 97 H | 1.217 | 1.052 | 0.814 | 0.845 | 0.428 | 0.611 | -0.822 | 1.217 | -0.822 | 0.592 |
| 98 G | 1.717 | 1.453 | 1.085 | 0.538 | 0.747 | 1.100 | 0.179 | 1.717 | 0.179 | 0.974 |
| 99 G | 2.216 | 1.639 | 1.356 | 0.215 | 1.066 | 1.589 | 1.180 | 2.216 | 0.215 | 1.323 |
| 100V | 2.134 | 1.587 | 1.403 | 0.363 | 1.066 | 1.589 | 1.061 | 2.134 | 0.363 | 1.315 |
| 101D | 2.267 | 1.479 | 1.674 | 0.646 | 1.367 | 1.594 | 0.793 | 2.267 | 0.646 | 1.403 |
| 102D | 2.399 | 1.754 | 2.010 | 0.729 | 1.777 | 2.193 | 0.766 | 2.399 | 0.729 | 1.661 |
| 103T | 1.457 | 1.754 | 1.935 | -0.000 | 1.832 | 2.199 | 1.201 | 2.199 | -0.000 | 1.483 |
| 104R | 1.957 | 2.076 | 2.487 | -1.051 | 2.315 | 2.822 | 0.612 | 2.822 | -1.051 | 1.602 |
| 105E | 1.957 | 1.263 | 2.487 | -1.705 | 2.315 | 2.822 | 0.612 | 2.822 | -1.705 | 1.393 |
| 106L | 1.590 | 0.513 | 2.646 | -1.853 | 2.470 | 2.958 | 0.620 | 2.958 | -1.853 | 1.278 |
| 107R | 1.394 | 0.311 | 2.449 | -1.486 | 2.315 | 2.938 | -0.431 | 2.938 | -1.486 | 1.070 |
| 108D | 0.547 | -0.502 | 1.954 | -1.123 | 1.795 | 2.317 | -0.179 | 2.317 | -1.123 | 0.687 |
| 109R | -0.066 | -0.683 | 1.879 | -1.007 | 1.668 | 1.737 | 0.179 | 1.879 | -1.007 | 0.530 |
| 110A | 0.648 | -1.592 | 1.963 | -1.118 | 1.658 | 1.732 | -1.266 | 1.963 | -1.592 | 0.289 |
| 111F | 0.515 | -1.101 | 1.776 | -1.017 | 1.458 | 1.126 | -1.045 | 1.776 | -1.101 | 0.245 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 112Y | -0.351 | -0.072 | 1.384 | -1.094 | 1.130 | 0.639 | -0.447 | 1.384 | -1.094 | 0.170 |
| 113A | -0.237 | 1.149 | 1.281 | -0.889 | 1.030 | 0.056 | -0.283 | 1.281 | -0.889 | 0.301 |
| 114P | 0.041 | 0.742 | 1.431 | -0.634 | 1.185 | 0.076 | 0.887 | 1.431 | -0.634 | 0.533 |
| 115V | 0.888 | 1.197 | 1.926 | -0.485 | 1.704 | 0.697 | 0.635 | 1.926 | -0.485 | 0.937 |
| 116Q | 0.888 | 1.197 | 1.926 | -0.328 | 1.704 | 0.697 | 0.635 | 1.926 | -0.328 | 0.960 |
| 117S | 1.021 | 0.532 | 2.356 | -0.482 | 2.178 | 1.322 | 1.644 | 2.356 | -0.482 | 1.224 |
| 118R | 0.655 | -0.649 | 1.991 | -0.976 | 1.895 | 1.304 | 2.013 | 2.013 | -0.976 | 0.890 |
| 119Y | 0.307 | -1.558 | 2.047 | -1.421 | 1.859 | 1.307 | 1.675 | 2.047 | -1.558 | 0.602 |
| 120R | -0.578 | -0.613 | 1.580 | -1.798 | 1.467 | 1.266 | 1.834 | 1.834 | -1.798 | 0.451 |
| 121V | -1.223 | -0.851 | 1.309 | -2.006 | 1.303 | 1.248 | 2.262 | 2.262 | -2.006 | 0.292 |
| 122F | -0.857 | -0.755 | 1.150 | -1.739 | 1.148 | 1.112 | 2.254 | 2.254 | -1.739 | 0.331 |
| 123I | -0.243 | -0.490 | 1.225 | -1.528 | 1.276 | 1.692 | 1.896 | 1.896 | -1.528 | 0.547 |
| 124V | -0.376 | -0.280 | 0.795 | -1.154 | 0.802 | 1.067 | 0.887 | 1.067 | -1.154 | 0.249 |
| 125D | -0.009 | -0.280 | 1.075 | -0.574 | 0.984 | 1.686 | 0.565 | 1.686 | -0.574 | 0.492 |
| 126E | 0.307 | -0.328 | 1.132 | -0.357 | 1.075 | 1.699 | 0.259 | 1.699 | -0.357 | 0.541 |
| 127A | 0.579 | -0.412 | 1.150 | -0.177 | 1.084 | 1.699 | 0.526 | 1.699 | -0.412 | 0.635 |
| 128H | 1.141 | -0.412 | 1.468 | -0.271 | 1.248 | 1.717 | -0.022 | 1.717 | -0.412 | 0.696 |
| 129M | 0.838 | 0.125 | 1.393 | -0.572 | 1.084 | 1.248 | 0.028 | 1.393 | -0.572 | 0.592 |
| 130V | 0.477 | 0.065 | 1.066 | -0.803 | 0.720 | 0.648 | -0.956 | 1.066 | -0.956 | 0.174 |
| 131T | 0.705 | 0.770 | 1.057 | -0.843 | 0.674 | 0.648 | 0.054 | 1.057 | -0.843 | 0.438 |
| 132T | -0.009 | 0.279 | 0.832 | -0.994 | 0.455 | 0.033 | 0.038 | 0.832 | -0.994 | 0.091 |
| 133A | 0.699 | -0.416 | 1.141 | -0.531 | 0.720 | 0.056 | -0.020 | 1.141 | -0.531 | 0.236 |
| 134G | 1.065 | -0.621 | 1.262 | -0.120 | 0.729 | 0.055 | -1.618 | 1.262 | -1.618 | 0.107 |
| 135F | 0.155 | -0.416 | 0.982 | 0.370 | 0.583 | 0.040 | -1.224 | 0.982 | -1.224 | 0.070 |
| 136N | -0.755 | -0.566 | 0.702 | 0.341 | 0.437 | 0.025 | -0.830 | 0.702 | -0.830 | -0.092 |
| 137A | -0.528 | -1.272 | 1.150 | -0.279 | 1.075 | 0.620 | 0.245 | 1.150 | -1.272 | 0.145 |
| 138L | -1.394 | -0.697 | 1.019 | -1.396 | 1.103 | 0.622 | 0.566 | 1.103 | -1.396 | -0.025 |
| 139L | -1.046 | 0.083 | 0.963 | -2.247 | 1.139 | 0.619 | 0.904 | 1.139 | -2.247 | 0.059 |
| 140K | -0.996 | 0.646 | 0.991 | -2.845 | 1.194 | 1.178 | 0.991 | 1.194 | -2.845 | 0.166 |
| 141I | -0.635 | 0.173 | 1.318 | -2.845 | 1.558 | 1.778 | 1.975 | 1.975 | -2.845 | 0.474 |
| 142V | 0.079 | 1.072 | 1.646 | -2.548 | 1.823 | 1.791 | 1.760 | 1.823 | -2.548 | 0.803 |
| 143E | 0.794 | 1.259 | 1.973 | -1.976 | 2.087 | 1.805 | 1.545 | 2.087 | -1.976 | 1.069 |
| 144E | 0.926 | 0.479 | 1.851 | -1.344 | 1.813 | 1.810 | 1.453 | 1.851 | -1.344 | 0.999 |
| 145P | 1.565 | -0.420 | 2.150 | -0.424 | 2.005 | 2.428 | 1.399 | 2.428 | -0.424 | 1.243 |
| 146P | 1.217 | -0.953 | 2.188 | 0.071 | 2.023 | 2.432 | 1.245 | 2.432 | -0.953 | 1.175 |
| 147E | 0.218 | -1.636 | 1.720 | 0.247 | 1.640 | 1.834 | 1.593 | 1.834 | -1.636 | 0.802 |
| 148H | -0.857 | -2.386 | 1.328 | -0.008 | 1.230 | 1.239 | 1.871 | 1.871 | -2.386 | 0.345 |
| 149L | -1.495 | -2.476 | 0.945 | -0.732 | 0.938 | 1.221 | 1.972 | 1.972 | -2.476 | 0.053 |
| 150I | -2.210 | -1.781 | 0.636 | -1.391 | 0.619 | 1.207 | 2.003 | 2.003 | -2.210 | -0.131 |
| 151F | -2.570 | -0.965 | 0.309 | -1.706 | 0.255 | 0.607 | 1.020 | 1.020 | -2.570 | -0.436 |
| 152I | -2.374 | -0.216 | 0.346 | -1.747 | 0.237 | 0.007 | 0.793 | 0.793 | -2.374 | -0.422 |
| 153F | -1.464 | 0.467 | 0.627 | -1.387 | 0.382 | 0.022 | 0.399 | 0.627 | -1.464 | -0.136 |
| 154A | -0.465 | 1.217 | 1.094 | -1.014 | 0.765 | 0.620 | 0.051 | 1.217 | -1.014 | 0.324 |
| 155T | 0.250 | 2.048 | 1.403 | -0.769 | 1.084 | 0.634 | 0.020 | 2.048 | -0.769 | 0.667 |
| 156T | 1.249 | 1.461 | 1.870 | -0.648 | 1.467 | 1.232 | -0.328 | 1.870 | -0.648 | 0.900 |
| 157E | 2.191 | 0.766 | 2.384 | -0.835 | 2.151 | 1.822 | -0.514 | 2.384 | -0.835 | 1.138 |
| 158P | 1.824 | 0.550 | 2.262 | -1.157 | 2.142 | 1.824 | 1.084 | 2.262 | -1.157 | 1.218 |
| 159E | 0.914 | 0.682 | 1.982 | -1.623 | 1.996 | 1.809 | 1.479 | 1.996 | -1.623 | 1.034 |
| 160K | 0.718 | -0.218 | 2.029 | -1.893 | 2.114 | 1.809 | 1.658 | 2.114 | -1.893 | 0.888 |
| 161V | 0.553 | -0.236 | 1.898 | -1.746 | 1.905 | 1.229 | 1.725 | 1.905 | -1.746 | 0.761 |
| 162L | -0.085 | 0.716 | 1.515 | -1.514 | 1.613 | 1.212 | 1.827 | 1.827 | -1.514 | 0.755 |
| 163P | -0.313 | 1.734 | 1.617 | -1.271 | 1.722 | 1.237 | 1.852 | 1.852 | -1.271 | 0.940 |
| 164T | -0.262 | 1.866 | 1.318 | -1.152 | 1.239 | 0.662 | 1.947 | 1.947 | -1.152 | 0.803 |
| 165I | 0.237 | 1.465 | 1.870 | -1.331 | 1.722 | 1.285 | 1.357 | 1.870 | -1.331 | 0.944 |
| 166R | 1.148 | 1.880 | 2.150 | -1.198 | 1.868 | 1.300 | 0.963 | 2.150 | -1.198 | 1.159 |
| 167S | 1.148 | 0.660 | 2.066 | -0.700 | 1.768 | 1.901 | 1.010 | 2.066 | -0.700 | 1.122 |
| 168R | 0.952 | 0.163 | 2.029 | 0.290 | 1.786 | 2.501 | 1.237 | 2.501 | 0.163 | 1.280 |
| 169T | 1.337 | -0.825 | 2.421 | 1.343 | 2.041 | 2.518 | 1.247 | 2.518 | -0.825 | 1.441 |
| 170H | 1.205 | -0.502 | 2.234 | 2.229 | 1.841 | 1.913 | 1.468 | 2.234 | -0.502 | 1.484 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 171H | 0.212 | -0.797 | 2.019 | 2.241 | 1.640 | 1.897 | 1.560 | 2.241 | -0.797 | 1.253 |
| 172Y | 0.212 | -1.091 | 2.019 | 1.634 | 1.640 | 1.897 | 1.560 | 2.019 | -1.091 | 1.124 |
| 173P | -0.698 | -0.326 | 1.739 | 0.520 | 1.494 | 1.882 | 1.954 | 1.954 | -0.698 | 0.938 |
| 174F | -1.413 | -0.326 | 1.496 | -0.659 | 1.330 | 1.268 | 2.121 | 2.121 | -1.413 | 0.545 |
| 175R | -1.413 | 0.662 | 1.580 | -1.430 | 1.431 | 0.667 | 2.074 | 2.074 | -1.430 | 0.510 |
| 176L | -1.160 | 0.339 | 1.571 | -1.541 | 1.467 | 0.666 | 1.962 | 1.962 | -1.541 | 0.472 |
| 177L | -1.027 | 0.429 | 1.758 | -1.339 | 1.668 | 1.272 | 1.741 | 1.758 | -1.339 | 0.643 |
| 178P | -0.117 | 1.447 | 2.019 | -0.878 | 1.868 | 1.288 | 1.531 | 2.019 | -0.878 | 1.023 |
| 179P | -0.648 | 1.089 | 1.580 | -0.756 | 1.440 | 0.680 | 1.476 | 1.580 | -0.756 | 0.694 |
| 180R | 0.199 | 0.525 | 2.094 | -1.050 | 1.905 | 1.300 | 1.040 | 2.094 | -1.050 | 0.859 |
| 181T | 0.914 | -0.492 | 2.178 | -1.605 | 1.895 | 1.294 | -0.405 | 2.178 | -1.605 | 0.540 |
| 182M | 0.199 | -0.983 | 1.851 | -2.154 | 1.631 | 1.281 | -0.190 | 1.851 | -2.154 | 0.234 |
| 183R | -0.515 | -0.056 | 1.524 | -2.526 | 1.367 | 1.267 | 0.025 | 1.524 | -2.526 | 0.155 |
| 184A | -0.648 | -1.194 | 1.094 | -2.554 | 0.893 | 0.642 | -0.984 | 1.094 | -2.554 | -0.393 |
| 185L | -0.711 | -1.158 | 1.328 | -2.616 | 1.212 | 1.247 | -1.025 | 1.328 | -2.616 | -0.246 |
| 186L | -0.951 | -0.378 | 1.197 | -2.622 | 1.148 | 1.232 | -0.649 | 1.232 | -2.622 | -0.146 |
| 187A | -1.128 | 0.317 | 0.552 | -2.498 | 0.583 | 0.625 | -0.025 | 0.625 | -2.498 | -0.225 |
| 188R | -0.768 | 0.892 | 0.879 | -2.368 | 0.948 | 1.224 | 0.958 | 1.224 | -2.368 | 0.252 |
| 189I | 0.193 | 0.706 | 1.290 | -1.921 | 1.312 | 1.261 | 0.687 | 1.312 | -1.921 | 0.504 |
| 190C | 1.268 | 0.934 | 1.702 | -1.553 | 1.668 | 1.856 | 0.225 | 1.856 | -1.553 | 0.871 |
| 191E | 1.495 | 0.802 | 1.692 | -1.292 | 1.622 | 1.856 | 1.236 | 1.856 | -1.292 | 1.059 |
| 192Q | 0.996 | 0.131 | 1.141 | -1.377 | 1.139 | 1.233 | 1.825 | 1.825 | -1.377 | 0.727 |
| 193E | 1.268 | 0.179 | 1.160 | -1.541 | 1.148 | 1.232 | 2.093 | 2.093 | -1.541 | 0.791 |
| 194G | 0.945 | 0.143 | 1.253 | -1.892 | 1.230 | 1.216 | 2.059 | 2.059 | -1.892 | 0.708 |
| 195V | 1.084 | -0.484 | 1.197 | -1.716 | 1.185 | 1.105 | 2.076 | 2.076 | -1.716 | 0.635 |
| 196V | 1.337 | -0.484 | 1.141 | -1.199 | 1.130 | 1.552 | 1.904 | 1.904 | -1.199 | 0.769 |
| 197V | 0.977 | -0.795 | 0.814 | -0.364 | 0.765 | 0.952 | 0.920 | 0.977 | -0.795 | 0.467 |
| 198D | 0.383 | -0.340 | 0.702 | 0.282 | 0.802 | 0.954 | 1.509 | 1.509 | -0.340 | 0.613 |
| 199D | 0.496 | -1.083 | 1.075 | 0.355 | 1.048 | 0.972 | 1.252 | 1.252 | -1.083 | 0.588 |
| 200A | 0.863 | -1.719 | 1.440 | -0.057 | 1.330 | 0.989 | 0.883 | 1.440 | -1.719 | 0.533 |
| 201V | 0.515 | -2.043 | 1.477 | -0.616 | 1.349 | 0.993 | 0.730 | 1.477 | -2.043 | 0.343 |
| 202Y | -0.351 | -1.133 | 1.085 | -0.994 | 1.020 | 0.506 | 1.327 | 1.327 | -1.133 | 0.209 |
| 203P | -1.489 | -0.727 | 0.674 | -1.359 | 0.683 | 0.019 | 1.658 | 1.658 | -1.489 | -0.077 |
| 204L | -1.356 | -0.458 | 1.103 | -1.737 | 1.157 | 0.643 | 2.667 | 2.667 | -1.737 | 0.289 |
| 205V | -0.989 | 0.373 | 1.225 | -2.278 | 1.166 | 0.642 | 1.068 | 1.225 | -2.278 | 0.172 |
| 206I | -0.509 | 1.097 | 0.963 | -2.605 | 0.884 | 0.622 | 0.736 | 1.097 | -2.605 | 0.170 |
| 207R | -0.281 | 2.277 | 0.711 | -2.650 | 0.565 | 0.603 | 0.517 | 2.277 | -2.650 | 0.249 |
| 208A | 0.661 | 1.822 | 0.786 | -2.330 | 0.510 | 0.598 | 0.082 | 1.822 | -2.330 | 0.304 |
| 209G | 1.306 | 2.635 | 1.057 | -1.778 | 0.674 | 0.616 | -0.347 | 2.635 | -1.778 | 0.595 |
| 210G | 1.944 | 2.547 | 1.440 | -1.088 | 0.966 | 0.634 | -0.449 | 2.547 | -1.088 | 0.856 |
| 211G | 1.944 | 2.411 | 1.440 | -0.499 | 0.966 | 0.634 | -0.449 | 2.411 | -0.499 | 0.921 |
| 212S | 2.444 | 1.579 | 1.711 | 0.092 | 1.285 | 1.122 | 0.553 | 2.444 | 0.092 | 1.255 |
| 213P | 2.412 | 1.579 | 1.917 | 0.350 | 1.485 | 1.142 | 0.593 | 2.412 | 0.350 | 1.354 |
| 214R | 1.470 | 1.125 | 1.842 | 0.343 | 1.540 | 1.148 | 1.028 | 1.842 | 0.343 | 1.214 |
| 215D | 1.521 | 0.107 | 2.001 | 0.363 | 1.741 | 1.168 | 1.187 | 2.001 | 0.107 | 1.155 |
| 216T | 0.876 | 0.107 | 1.730 | 0.123 | 1.576 | 1.149 | 1.616 | 1.730 | 0.107 | 1.025 |
| 217L | 0.161 | 0.107 | 1.403 | -0.191 | 1.312 | 1.136 | 1.831 | 1.831 | -0.191 | 0.823 |
| 218S | 0.528 | 0.107 | 1.244 | -0.283 | 1.157 | 1.000 | 1.823 | 1.823 | -0.283 | 0.797 |
| 219V | 0.275 | -0.953 | 1.300 | -0.430 | 1.212 | 0.554 | 1.995 | 1.995 | -0.953 | 0.565 |
| 220L | -0.635 | -0.857 | 1.019 | -0.374 | 1.066 | 0.539 | 2.390 | 2.390 | -0.857 | 0.450 |
| 221D | -0.635 | -0.026 | 1.019 | -0.339 | 1.066 | 0.539 | 2.390 | 2.390 | -0.635 | 0.573 |
| 222Q | -0.913 | -0.564 | 0.870 | -0.746 | 0.911 | 0.519 | 1.220 | 1.220 | -0.913 | 0.185 |
| 223L | -0.319 | -1.055 | 0.982 | -1.291 | 0.875 | 0.517 | 0.631 | 0.982 | -1.291 | 0.049 |
| 224L | 0.395 | -0.312 | 1.066 | -1.773 | 0.866 | 0.512 | -0.814 | 1.066 | -1.773 | -0.009 |
| 225A | -0.104 | 0.383 | 0.795 | -2.105 | 0.547 | 0.023 | -1.815 | 0.795 | -2.105 | -0.325 |
| 226G | 0.149 | 0.473 | 0.739 | -1.823 | 0.492 | 0.470 | -1.987 | 0.739 | -1.987 | -0.212 |
| 227A | 1.059 | -0.250 | 1.019 | -1.287 | 0.638 | 0.484 | -2.381 | 1.059 | -2.381 | -0.103 |
| 228A | 1.774 | 0.241 | 1.262 | -0.248 | 0.802 | 1.099 | -2.549 | 1.774 | -2.549 | 0.340 |
| 229D | 1.407 | -0.166 | 1.141 | 0.606 | 0.793 | 1.100 | -0.950 | 1.407 | -0.950 | 0.561 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 230T | 1.375 | -0.214 | 1.346 | 1.267 | 0.993 | 1.120 | -0.910 | 1.375 | -0.910 | 0.711 |
| 231H | 1.122 | 0.109 | 1.599 | 1.168 | 1.230 | 1.139 | 0.432 | 1.599 | 0.109 | 0.971 |
| 232V | 1.318 | 0.019 | 1.795 | 0.759 | 1.385 | 1.159 | 1.483 | 1.795 | 0.019 | 1.131 |
| 233T | 0.952 | -0.090 | 1.954 | -0.071 | 1.540 | 1.295 | 1.491 | 1.954 | -0.090 | 1.010 |
| 234Y | 0.756 | 0.047 | 1.758 | -0.580 | 1.385 | 1.275 | 0.440 | 1.758 | -0.580 | 0.726 |
| 235T | 0.041 | 0.249 | 1.515 | -1.258 | 1.221 | 0.661 | 0.608 | 1.515 | -1.258 | 0.434 |
| 236R | 0.636 | -0.446 | 1.627 | -1.621 | 1.185 | 0.659 | 0.020 | 1.627 | -1.621 | 0.294 |
| 237A | -0.275 | -0.633 | 1.346 | -2.046 | 1.039 | 0.645 | 0.414 | 1.346 | -2.046 | 0.070 |
| 238L | -0.736 | -0.729 | 1.010 | -2.222 | 0.811 | 0.631 | 0.517 | 1.010 | -2.222 | -0.103 |
| 239G | -0.705 | -0.034 | 0.804 | -2.311 | 0.610 | 0.611 | 0.476 | 0.804 | -2.311 | -0.078 |
| 240L | -1.204 | -0.122 | 0.253 | -2.268 | 0.127 | -0.012 | 1.066 | 1.066 | -2.268 | -0.309 |
| 241L | -1.008 | -0.013 | 0.449 | -2.109 | 0.282 | 0.008 | 2.117 | 2.117 | -2.109 | -0.039 |
| 242G | 0.206 | 0.191 | 0.804 | -1.587 | 0.592 | 0.491 | 1.673 | 1.673 | -1.587 | 0.339 |
| 243V | -0.389 | -0.641 | 0.692 | -0.992 | 0.629 | 0.493 | 2.261 | 2.261 | -0.992 | 0.293 |
| 244T | 0.326 | -0.869 | 0.776 | -0.421 | 0.619 | 0.487 | 0.816 | 0.816 | -0.869 | 0.248 |
| 245D | 0.326 | -0.821 | 0.776 | -0.356 | 0.619 | 0.487 | 0.816 | 0.816 | -0.821 | 0.264 |
| 246V | -0.540 | -0.821 | 0.646 | -0.901 | 0.647 | 0.489 | 1.138 | 1.138 | -0.901 | 0.094 |
| 247A | 0.326 | -0.725 | 1.038 | -1.387 | 0.975 | 0.976 | 0.540 | 1.038 | -1.387 | 0.249 |
| 248L | 0.629 | -0.821 | 1.113 | -1.370 | 1.139 | 1.445 | 0.490 | 1.445 | -1.370 | 0.375 |
| 249I | 0.130 | -0.078 | 0.842 | -0.857 | 0.820 | 0.956 | -0.511 | 0.956 | -0.857 | 0.186 |
| 250D | 0.130 | 0.247 | 0.842 | -0.093 | 0.820 | 0.956 | -0.511 | 0.956 | -0.511 | 0.342 |
| 251D | 0.629 | -0.496 | 1.113 | 0.382 | 1.139 | 1.445 | 0.490 | 1.445 | -0.496 | 0.672 |
| 252A | 1.344 | -1.035 | 1.197 | 0.207 | 1.130 | 1.440 | -0.955 | 1.440 | -1.035 | 0.475 |
| 253V | 1.268 | -1.035 | 1.253 | -0.095 | 1.157 | 1.444 | -0.842 | 1.444 | -1.035 | 0.450 |
| 254D | 0.768 | -0.903 | 0.982 | -0.610 | 0.838 | 0.955 | -1.843 | 0.982 | -1.843 | 0.027 |
| 255A | 0.269 | -0.903 | 0.711 | -1.132 | 0.519 | 0.466 | -2.844 | 0.711 | -2.844 | -0.416 |
| 256L | 0.225 | -0.903 | 0.496 | -1.427 | 0.428 | 0.484 | -1.212 | 0.496 | -1.427 | -0.273 |
| 257A | 1.091 | -0.699 | 0.889 | -1.226 | 0.756 | 0.971 | -1.809 | 1.091 | -1.809 | -0.004 |
| 258A | 0.591 | -0.699 | 0.618 | -0.800 | 0.437 | 0.482 | -2.810 | 0.618 | -2.810 | -0.312 |
| 259C | 0.591 | -0.903 | 0.618 | -0.162 | 0.437 | 0.482 | -2.810 | 0.618 | -2.810 | -0.250 |
| 260D | 1.306 | -1.113 | 0.702 | -0.074 | 0.428 | 0.477 | -4.255 | 1.306 | -4.255 | -0.362 |
| 261A | 0.591 | -1.025 | 0.618 | -0.606 | 0.437 | 0.482 | -2.810 | 0.618 | -2.810 | -0.331 |
| 262A | -0.123 | -1.025 | 0.552 | -1.245 | 0.392 | 0.486 | -1.549 | 0.552 | -1.549 | -0.359 |
| 263A | 0.149 | -1.350 | 0.758 | -1.676 | 0.437 | 0.468 | -2.171 | 0.758 | -2.171 | -0.484 |
| 264L | -0.351 | -0.775 | 0.487 | -1.764 | 0.118 | -0.021 | -3.172 | 0.487 | -3.172 | -0.783 |
| 265F | -0.989 | 0.285 | 0.346 | -1.716 | 0.100 | -0.019 | -1.840 | 0.346 | -1.840 | -0.548 |
| 266G | -0.629 | 0.363 | 0.674 | -1.853 | 0.465 | 0.581 | -0.857 | 0.674 | -1.853 | -0.179 |
| 267A | -0.351 | -0.589 | 0.823 | -1.932 | 0.619 | 0.601 | 0.313 | 0.823 | -1.932 | -0.073 |
| 268I | -0.003 | -0.050 | 0.786 | -1.864 | 0.601 | 0.597 | 0.467 | 0.786 | -1.864 | 0.076 |
| 269E | 0.073 | 0.902 | 0.711 | -1.648 | 0.629 | 0.595 | 0.538 | 0.902 | -1.648 | 0.257 |
| 270S | 0.345 | 0.954 | 0.991 | -1.177 | 0.993 | 1.084 | 0.528 | 1.084 | -1.177 | 0.531 |
| 271V | 0.572 | 0.189 | 0.982 | -0.955 | 0.948 | 1.084 | 1.539 | 1.539 | -0.955 | 0.623 |
| 272I | 1.438 | 0.824 | 1.113 | -0.769 | 0.920 | 1.082 | 1.217 | 1.438 | -0.769 | 0.832 |
| 273D | 1.078 | 1.507 | 0.945 | -0.327 | 0.729 | 1.102 | 1.511 | 1.511 | -0.327 | 0.935 |
| 274G | 1.299 | 1.782 | 1.066 | 0.247 | 0.893 | 1.571 | 1.342 | 1.782 | 0.247 | 1.171 |
| 275G | 1.666 | 1.968 | 1.431 | 1.083 | 1.175 | 1.588 | 0.973 | 1.968 | 0.973 | 1.412 |
| 276H | 2.437 | 1.167 | 2.001 | 1.648 | 1.668 | 2.211 | 0.651 | 2.437 | 0.651 | 1.683 |
| 277D | 2.071 | 1.076 | 2.160 | 1.380 | 1.823 | 2.347 | 0.659 | 2.347 | 0.659 | 1.645 |
| 278P | 1.129 | 1.028 | 2.103 | 0.570 | 1.823 | 2.351 | 0.910 | 2.351 | 0.570 | 1.416 |
| 279R | 0.901 | 1.209 | 2.113 | -0.504 | 1.868 | 2.351 | -0.101 | 2.351 | -0.504 | 1.120 |
| 280R | 1.097 | 0.191 | 2.150 | -1.244 | 1.850 | 1.751 | -0.327 | 2.150 | -1.244 | 0.781 |
| 281F | 1.097 | -0.827 | 2.150 | -1.131 | 1.850 | 1.751 | -0.327 | 2.150 | -1.131 | 0.652 |
| 282A | 0.383 | -0.078 | 1.823 | -0.710 | 1.586 | 1.738 | -0.112 | 1.823 | -0.710 | 0.661 |
| 283T | -0.465 | 0.736 | 1.309 | -0.300 | 1.121 | 1.118 | 0.324 | 1.309 | -0.465 | 0.549 |
| 284D | -0.237 | 0.071 | 1.206 | -0.388 | 1.011 | 1.093 | 0.298 | 1.206 | -0.388 | 0.436 |
| 285L | 0.610 | 0.345 | 1.702 | -1.023 | 1.531 | 1.714 | 0.046 | 1.714 | -1.023 | 0.704 |
| 286L | -0.104 | 1.089 | 1.636 | -1.622 | 1.485 | 1.718 | 1.308 | 1.718 | -1.622 | 0.787 |
| 287E | -0.167 | 1.089 | 1.870 | -2.038 | 1.804 | 2.323 | 1.266 | 2.323 | -2.038 | 0.878 |
| 288R | -0.167 | 0.189 | 1.870 | -1.840 | 1.804 | 2.323 | 1.266 | 2.323 | -1.840 | 0.778 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 289F | -0.167 | -0.721 | 1.870 | -1.391 | 1.804 | 2.323 | 1.266 | 2.323 | -1.391 | 0.712 |
| 290R | -0.092 | -0.751 | 1.814 | -1.012 | 1.777 | 2.319 | 1.153 | 2.319 | -1.012 | 0.744 |
| 291D | -0.819 | -1.073 | 1.365 | -1.085 | 1.403 | 1.721 | 1.768 | 1.768 | -1.085 | 0.469 |
| 292L | -1.666 | -0.757 | 0.851 | -1.492 | 0.938 | 1.102 | 2.203 | 2.203 | -1.666 | 0.169 |
| 293I | -0.705 | -0.649 | 1.244 | -2.010 | 1.358 | 1.140 | 2.116 | 2.116 | -2.010 | 0.356 |
| 294V | -0.559 | 0.035 | 0.963 | -1.879 | 1.039 | 0.535 | 2.276 | 2.276 | -1.879 | 0.344 |
| 295L | -1.426 | 0.670 | 0.571 | -1.524 | 0.711 | 0.048 | 2.874 | 2.874 | -1.524 | 0.275 |
| 296Q | -0.711 | 0.874 | 0.898 | -0.702 | 0.975 | 0.062 | 2.659 | 2.659 | -0.711 | 0.579 |
| 297S | 0.427 | 0.383 | 1.309 | 0.039 | 1.312 | 0.549 | 2.328 | 2.328 | 0.039 | 0.907 |
| 298V | 0.794 | 0.383 | 1.431 | 0.382 | 1.321 | 0.547 | 0.730 | 1.431 | 0.382 | 0.798 |
| 299P | 1.508 | 1.293 | 1.515 | 0.443 | 1.312 | 0.542 | -0.716 | 1.515 | -0.716 | 0.842 |
| 300D | 1.540 | 1.561 | 1.337 | 0.359 | 1.093 | 0.519 | -0.719 | 1.561 | -0.719 | 0.813 |
| 301A | 1.394 | 0.926 | 1.617 | -0.095 | 1.412 | 1.124 | -0.880 | 1.617 | -0.880 | 0.786 |
| 302A | 1.989 | 0.830 | 1.730 | -0.388 | 1.376 | 1.122 | -1.468 | 1.989 | -1.468 | 0.741 |
| 303S | 1.622 | 1.369 | 1.365 | -0.808 | 1.093 | 1.105 | -1.099 | 1.622 | -1.099 | 0.664 |
| 304R | 0.756 | 0.513 | 0.973 | -1.256 | 0.765 | 0.618 | -0.502 | 0.973 | -1.256 | 0.267 |
| 305G | 1.255 | 0.059 | 1.244 | -1.343 | 1.084 | 1.107 | 0.499 | 1.255 | -1.343 | 0.558 |
| 306V | 1.255 | 0.007 | 1.244 | -1.254 | 1.084 | 1.107 | 0.499 | 1.255 | -1.254 | 0.563 |
| 307V | 0.977 | 0.642 | 1.337 | -0.852 | 1.203 | 1.106 | 0.560 | 1.337 | -0.852 | 0.710 |
| 308D | 1.205 | 0.738 | 1.234 | -0.456 | 1.093 | 1.080 | 0.534 | 1.234 | -0.456 | 0.776 |
| 309A | 1.476 | -0.005 | 1.515 | -0.087 | 1.458 | 1.569 | 0.525 | 1.569 | -0.087 | 0.922 |
| 310P | 1.843 | 0.534 | 1.636 | -0.117 | 1.467 | 1.568 | -1.074 | 1.843 | -1.074 | 0.837 |
| 311E | 1.495 | 0.988 | 1.674 | -0.134 | 1.485 | 1.572 | -1.228 | 1.674 | -1.228 | 0.836 |
| 312D | 1.495 | 0.299 | 1.674 | -0.260 | 1.485 | 1.572 | -1.228 | 1.674 | -1.228 | 0.720 |
| 313A | 1.628 | 0.574 | 2.103 | -0.353 | 1.959 | 2.196 | -0.218 | 2.196 | -0.353 | 1.127 |
| 314L | 1.230 | 1.149 | 1.851 | -0.666 | 1.731 | 2.195 | -0.494 | 2.195 | -0.666 | 0.999 |
| 315D | 1.002 | 1.844 | 1.954 | -1.032 | 1.841 | 2.220 | -0.468 | 2.220 | -1.032 | 1.052 |
| 316R | 0.863 | 1.305 | 2.010 | -1.704 | 1.886 | 2.330 | -0.486 | 2.330 | -1.704 | 0.886 |
| 317M | 1.110 | 0.491 | 2.337 | -2.158 | 2.260 | 2.373 | 0.688 | 2.373 | -2.158 | 1.014 |
| 318R | 1.824 | 1.419 | 2.421 | -2.291 | 2.251 | 2.367 | -0.757 | 2.421 | -2.291 | 1.034 |
| 319E | 1.325 | 0.281 | 2.150 | -2.210 | 1.932 | 1.878 | -1.758 | 2.150 | -2.210 | 0.514 |
| 320Q | 1.325 | 0.333 | 2.150 | -1.963 | 1.932 | 1.878 | -1.758 | 2.150 | -1.963 | 0.557 |
| 321A | 1.084 | 0.656 | 2.019 | -2.013 | 1.868 | 1.863 | -1.381 | 2.019 | -2.013 | 0.585 |
| 322A | 1.179 | 0.656 | 1.580 | -2.279 | 1.349 | 1.238 | -1.380 | 1.580 | -2.279 | 0.335 |
| 323R | 0.952 | 1.147 | 1.683 | -2.577 | 1.458 | 1.263 | -1.355 | 1.683 | -2.577 | 0.367 |
| 324I | 0.705 | 0.129 | 1.356 | -2.720 | 1.084 | 1.221 | -2.528 | 1.356 | -2.720 | -0.108 |
| 325G | 0.901 | 0.944 | 1.552 | -2.515 | 1.239 | 1.241 | -1.477 | 1.552 | -2.515 | 0.269 |
| 326R | 0.187 | 1.131 | 1.468 | -2.229 | 1.248 | 1.246 | -0.032 | 1.468 | -2.229 | 0.431 |
| 327A | 0.250 | -0.090 | 1.234 | -1.787 | 0.929 | 0.642 | 0.009 | 1.234 | -1.787 | 0.170 |
| 328T | 1.021 | -0.090 | 1.804 | -1.511 | 1.422 | 1.264 | -0.313 | 1.804 | -1.511 | 0.514 |
| 329L | 0.541 | -0.005 | 2.066 | -1.361 | 1.704 | 1.284 | 0.019 | 2.066 | -1.361 | 0.607 |
| 330T | 0.408 | 0.103 | 1.636 | -1.428 | 1.230 | 0.659 | -0.991 | 1.636 | -1.428 | 0.231 |
| 331R | 0.768 | -0.484 | 1.963 | -1.565 | 1.595 | 1.259 | -0.007 | 1.963 | -1.565 | 0.504 |
| 332Y | 0.206 | -0.807 | 1.646 | -1.837 | 1.431 | 1.240 | 0.541 | 1.646 | -1.837 | 0.346 |
| 333A | 0.553 | -0.400 | 1.608 | -1.970 | 1.412 | 1.236 | 0.695 | 1.608 | -1.970 | 0.448 |
| 334E | 0.604 | 0.227 | 1.739 | -2.059 | 1.631 | 1.259 | 0.817 | 1.739 | -2.059 | 0.603 |
| 335V | 0.471 | -0.552 | 1.309 | -1.955 | 1.157 | 0.634 | -0.192 | 1.309 | -1.955 | 0.125 |
| 336V | 0.952 | 0.171 | 1.047 | -1.783 | 0.875 | 0.615 | -0.524 | 1.047 | -1.783 | 0.193 |
| 337Q | 0.237 | 0.842 | 0.963 | -1.678 | 0.884 | 0.620 | 0.921 | 0.963 | -1.678 | 0.399 |
| 338A | 0.104 | 0.237 | 0.627 | -1.671 | 0.474 | 0.021 | 0.948 | 0.948 | -1.671 | 0.106 |
| 339G | 0.832 | 1.050 | 1.075 | -1.844 | 0.847 | 0.619 | 0.333 | 1.075 | -1.844 | 0.416 |
| 340L | 0.800 | 1.050 | 1.188 | -2.063 | 0.902 | 0.634 | -0.311 | 1.188 | -2.063 | 0.314 |
| 341G | 0.686 | 1.255 | 1.290 | -2.359 | 1.002 | 1.217 | -0.475 | 1.290 | -2.359 | 0.374 |
| 342E | 0.914 | 1.119 | 1.281 | -2.538 | 0.957 | 1.217 | 0.535 | 1.281 | -2.538 | 0.498 |
| 343M | 0.686 | 0.544 | 1.290 | -2.662 | 1.002 | 1.217 | -0.475 | 1.290 | -2.662 | 0.229 |
| 344R | 1.597 | 1.016 | 1.571 | -2.442 | 1.148 | 1.231 | -0.869 | 1.597 | -2.442 | 0.464 |
| 345G | 1.369 | 1.016 | 1.580 | -2.116 | 1.194 | 1.231 | -1.880 | 1.580 | -2.116 | 0.342 |
| 346A | 1.009 | 0.185 | 1.496 | -1.559 | 1.103 | 0.651 | -1.634 | 1.496 | -1.634 | 0.179 |
| 347T | 1.540 | -0.019 | 1.935 | -1.221 | 1.531 | 1.258 | -1.579 | 1.935 | -1.579 | 0.492 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 348A | 0.692 | -0.715 | 1.421 | -1.087 | 1.066 | 0.639 | -1.143 | 1.421 | -1.143 | 0.125 |
| 349P | -0.250 | -0.140 | 1.346 | -1.350 | 1.121 | 0.644 | -0.709 | 1.346 | -1.350 | 0.095 |
| 350R | -0.964 | -0.595 | 1.262 | -1.741 | 1.130 | 0.650 | 0.736 | 1.262 | -1.741 | 0.068 |
| 351L | -0.800 | -1.504 | 1.393 | -2.237 | 1.339 | 1.229 | 0.669 | 1.393 | -2.237 | 0.013 |
| 352L | -1.166 | -1.264 | 1.272 | -2.445 | 1.330 | 1.231 | 2.268 | 2.268 | -2.445 | 0.175 |
| 353L | -1.533 | -1.059 | 0.907 | -2.562 | 1.048 | 1.213 | 2.637 | 2.637 | -2.562 | 0.093 |
| 354E | -1.710 | -0.042 | 0.262 | -2.247 | 0.483 | 0.607 | 3.260 | 3.260 | -2.247 | 0.088 |
| 355V | -0.996 | -0.821 | 0.346 | -1.905 | 0.474 | 0.601 | 1.815 | 1.815 | -1.905 | -0.069 |
| 356V | -0.148 | -0.929 | 0.860 | -1.544 | 0.938 | 1.220 | 1.379 | 1.379 | -1.544 | 0.254 |
| 357C | -0.148 | -1.037 | 0.860 | -1.449 | 0.938 | 1.220 | 1.379 | 1.379 | -1.449 | 0.252 |
| 358A | -1.223 | -0.715 | 0.449 | -1.672 | 0.583 | 0.626 | 1.840 | 1.840 | -1.672 | -0.016 |
| 359R | -1.571 | 0.141 | 0.487 | -2.112 | 0.601 | 0.630 | 1.687 | 1.687 | -2.112 | -0.020 |
| 360L | -1.204 | -0.673 | 0.851 | -2.235 | 0.884 | 0.647 | 1.318 | 1.318 | -2.235 | -0.059 |
| 361L | -0.882 | 0.387 | 1.216 | -1.929 | 1.130 | 0.650 | 0.856 | 1.216 | -1.929 | 0.204 |
| 362L | -0.882 | 1.131 | 1.216 | -1.231 | 1.130 | 0.650 | 0.856 | 1.216 | -1.231 | 0.410 |
| 363P | -0.736 | 1.335 | 0.935 | -0.302 | 0.811 | 0.045 | 1.016 | 1.335 | -0.736 | 0.443 |
| 364S | 0.477 | 1.551 | 1.290 | 0.471 | 1.121 | 0.529 | 0.572 | 1.551 | 0.471 | 0.859 |
| 365A | 1.192 | 1.551 | 1.375 | 0.873 | 1.112 | 0.523 | -0.873 | 1.551 | -0.873 | 0.822 |
| 366S | 2.267 | 1.551 | 1.786 | 0.890 | 1.467 | 1.117 | -1.334 | 2.267 | -1.334 | 1.106 |
| 367D | 2.545 | 0.491 | 1.692 | 0.664 | 1.349 | 1.119 | -1.394 | 2.545 | -1.394 | 0.924 |
| 368A | 2.267 | -0.252 | 1.543 | 0.086 | 1.194 | 1.098 | -2.564 | 2.267 | -2.564 | 0.482 |
| 369E | 1.552 | 0.239 | 1.459 | -0.329 | 1.203 | 1.104 | -1.119 | 1.552 | -1.119 | 0.587 |
| 370S | 0.560 | 0.477 | 1.225 | -0.848 | 1.057 | 1.089 | -0.844 | 1.225 | -0.848 | 0.388 |
| 371A | 0.307 | -0.474 | 1.281 | -1.247 | 1.112 | 0.643 | -0.672 | 1.281 | -1.247 | 0.136 |
| 372L | 0.440 | 0.101 | 1.711 | -1.619 | 1.586 | 1.267 | 0.338 | 1.711 | -1.619 | 0.546 |
| 373L | -0.288 | 1.119 | 1.262 | -1.798 | 1.212 | 0.669 | 0.953 | 1.262 | -1.798 | 0.447 |
| 374Q | -0.205 | 0.998 | 1.440 | -2.027 | 1.422 | 1.249 | 0.766 | 1.440 | -2.027 | 0.520 |
| 375R | -0.073 | 1.082 | 1.870 | -2.115 | 1.895 | 1.874 | 1.776 | 1.895 | -2.115 | 0.901 |
| 376V | 0.003 | 0.760 | 1.814 | -2.381 | 1.868 | 1.870 | 1.662 | 1.870 | -2.381 | 0.799 |
| 377E | 1.078 | 1.670 | 2.225 | -2.621 | 2.224 | 2.464 | 1.201 | 2.464 | -2.621 | 1.177 |
| 378R | 1.028 | 0.890 | 2.094 | -2.723 | 2.005 | 2.442 | 1.079 | 2.442 | -2.723 | 0.973 |
| 379I | 1.028 | 0.616 | 2.094 | -2.587 | 2.005 | 2.442 | 1.079 | 2.442 | -2.587 | 0.954 |
| 380E | 0.680 | 0.826 | 2.132 | -2.317 | 2.023 | 2.445 | 0.925 | 2.445 | -2.317 | 0.959 |
| 381T | 0.819 | 1.107 | 2.075 | -1.813 | 1.977 | 2.335 | 0.942 | 2.335 | -1.813 | 1.063 |
| 382R | 0.288 | 0.291 | 1.636 | -1.504 | 1.549 | 1.727 | 0.888 | 1.727 | -1.504 | 0.696 |
| 383L | 1.205 | -0.164 | 1.926 | -0.948 | 1.722 | 1.746 | 0.726 | 1.926 | -0.948 | 0.888 |
| 384D | 0.206 | 0.041 | 1.459 | -0.731 | 1.339 | 1.148 | 1.074 | 1.459 | -0.731 | 0.648 |
| 385M | 0.010 | -0.140 | 1.505 | -0.509 | 1.458 | 1.147 | 1.253 | 1.505 | -0.509 | 0.675 |
| 386S | -0.123 | 0.465 | 1.075 | -0.641 | 0.984 | 0.522 | 0.244 | 1.075 | -0.641 | 0.361 |
| 387I | 0.591 | -0.390 | 1.403 | -0.594 | 1.248 | 0.536 | 0.029 | 1.403 | -0.594 | 0.403 |
| 388P | 0.338 | -0.162 | 1.459 | -0.732 | 1.303 | 0.089 | 0.201 | 1.459 | -0.732 | 0.357 |
| 389A | 0.737 | -0.162 | 1.468 | -0.508 | 1.257 | 0.072 | -0.754 | 1.468 | -0.754 | 0.302 |
| 390P | 0.092 | 0.652 | 1.197 | -0.666 | 1.093 | 0.054 | -0.325 | 1.197 | -0.666 | 0.299 |
| 391Q | 0.730 | 0.652 | 1.580 | -0.655 | 1.385 | 0.071 | -0.427 | 1.580 | -0.655 | 0.477 |
| 392A | 0.863 | 1.016 | 1.767 | -1.022 | 1.586 | 0.676 | -0.647 | 1.767 | -1.022 | 0.606 |
| 393V | 0.863 | 1.016 | 2.010 | -1.007 | 1.859 | 0.695 | 0.583 | 2.010 | -1.007 | 0.860 |
| 394P | 1.141 | 1.113 | 1.917 | -0.802 | 1.741 | 0.697 | 0.523 | 1.917 | -0.802 | 0.904 |
| 395R | 0.895 | 0.754 | 1.589 | -0.438 | 1.367 | 0.654 | -0.651 | 1.589 | -0.651 | 0.596 |
| 396P | 0.895 | -0.060 | 1.589 | -0.161 | 1.367 | 0.654 | -0.651 | 1.589 | -0.651 | 0.519 |
| 397S | 1.261 | 0.157 | 1.711 | -0.250 | 1.376 | 0.653 | -2.250 | 1.711 | -2.250 | 0.380 |
| 398A | 1.261 | -0.340 | 1.468 | -0.822 | 1.103 | 0.634 | -3.480 | 1.468 | -3.480 | -0.025 |
| 399A | 1.489 | 0.491 | 1.365 | -1.432 | 0.993 | 0.608 | -3.505 | 1.489 | -3.505 | 0.001 |
| 400A | 1.489 | 0.582 | 1.365 | -1.768 | 0.993 | 0.608 | -3.505 | 1.489 | -3.505 | -0.034 |
| 401A | 1.438 | 1.072 | 1.664 | -1.875 | 1.476 | 1.183 | -3.600 | 1.664 | -3.600 | 0.194 |
| 402E | 1.438 | 1.431 | 1.823 | -1.221 | 1.649 | 1.803 | -2.323 | 1.823 | -2.323 | 0.657 |
| 403P | 1.685 | 0.856 | 2.150 | -0.543 | 2.023 | 1.845 | -1.149 | 2.150 | -1.149 | 0.981 |
| 404K | 1.685 | 1.311 | 2.393 | 0.335 | 2.296 | 1.864 | 0.081 | 2.393 | 0.081 | 1.424 |
| 405H | 1.685 | 1.054 | 2.393 | 0.731 | 2.296 | 1.864 | 0.081 | 2.393 | 0.081 | 1.444 |
| 406Q | 1.457 | 1.323 | 2.496 | 0.643 | 2.406 | 1.889 | 0.106 | 2.496 | 0.106 | 1.474 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 407P | 1.818 | 1.646 | 2.580 | -0.191 | 2.497 | 2.470 | -0.140 | 2.580 | -0.191 | 1.526 |
| 408A | 1.590 | 1.646 | 2.374 | -0.855 | 2.132 | 1.894 | 0.015 | 2.374 | -0.855 | 1.257 |
| 409R | 1.723 | 1.549 | 2.646 | -1.572 | 2.433 | 1.899 | -0.253 | 2.646 | -1.572 | 1.204 |
| 410E | 1.476 | 0.532 | 2.561 | -1.470 | 2.333 | 1.876 | -0.197 | 2.561 | -1.470 | 1.016 |
| 411P | 1.110 | -0.044 | 2.197 | -1.322 | 2.050 | 1.858 | 0.172 | 2.197 | -1.322 | 0.860 |
| 412R | 0.395 | -0.044 | 2.113 | -1.124 | 2.060 | 1.864 | 1.617 | 2.113 | -1.124 | 0.983 |
| 413P | 0.263 | -0.366 | 1.683 | -1.252 | 1.586 | 1.239 | 0.608 | 1.683 | -1.252 | 0.537 |
| 414V | -0.098 | -0.366 | 1.599 | -1.355 | 1.494 | 0.658 | 0.854 | 1.599 | -1.355 | 0.398 |
| 415L | 0.098 | -0.270 | 1.552 | -1.433 | 1.376 | 0.659 | 0.675 | 1.552 | -1.433 | 0.380 |
| 416A | -0.035 | 0.790 | 1.365 | -0.959 | 1.175 | 0.054 | 0.896 | 1.365 | -0.959 | 0.470 |
| 417P | -0.035 | 1.646 | 1.122 | -0.558 | 0.902 | 0.035 | -0.334 | 1.646 | -0.558 | 0.397 |
| 418T | 0.610 | 1.862 | 1.393 | 0.001 | 1.066 | 0.053 | -0.763 | 1.862 | -0.763 | 0.603 |
| 419P | 1.603 | 1.730 | 1.627 | 0.353 | 1.212 | 0.068 | -1.038 | 1.730 | -1.038 | 0.793 |
| 420A | 1.963 | 1.862 | 1.954 | 0.547 | 1.576 | 0.667 | -0.054 | 1.963 | -0.054 | 1.217 |
| 421S | 1.963 | 1.766 | 1.954 | 0.668 | 1.576 | 0.667 | -0.054 | 1.963 | -0.054 | 1.220 |
| 422S | 1.963 | 0.910 | 1.954 | 0.644 | 1.576 | 0.667 | -0.054 | 1.963 | -0.054 | 1.094 |
| 423E | 1.597 | 0.055 | 1.589 | 0.314 | 1.294 | 0.650 | 0.314 | 1.597 | 0.055 | 0.830 |
| 424P | 1.597 | -0.617 | 1.589 | -0.105 | 1.294 | 0.650 | 0.314 | 1.597 | -0.617 | 0.675 |
| 425T | 1.318 | -0.162 | 1.440 | -0.699 | 1.139 | 0.630 | -0.855 | 1.440 | -0.855 | 0.402 |
| 426V | 0.673 | 0.203 | 1.169 | -1.317 | 0.975 | 0.611 | -0.427 | 1.169 | -1.317 | 0.270 |
| 427A | 0.446 | 0.185 | 1.272 | -1.775 | 1.084 | 0.637 | -0.401 | 1.272 | -1.775 | 0.207 |
| 428A | 0.724 | -0.318 | 1.178 | -1.899 | 0.966 | 0.638 | -0.461 | 1.178 | -1.899 | 0.118 |
| 429V | 0.130 | 0.041 | 0.973 | -1.865 | 0.856 | 0.635 | -0.557 | 0.973 | -1.865 | 0.030 |
| 430R | -0.269 | 0.628 | 1.113 | -1.583 | 0.884 | 0.659 | -1.124 | 1.113 | -1.583 | 0.044 |
| 431S | -0.269 | -0.282 | 1.356 | -1.373 | 1.157 | 0.678 | 0.106 | 1.356 | -1.373 | 0.196 |
| 432M | -0.073 | -0.324 | 1.552 | -1.196 | 1.312 | 0.697 | 1.157 | 1.552 | -1.196 | 0.447 |
| 433W | -0.073 | 0.329 | 1.552 | -1.085 | 1.312 | 0.697 | 1.157 | 1.552 | -1.085 | 0.556 |
| 434P | -0.073 | 1.664 | 1.552 | -0.941 | 1.312 | 0.697 | 1.157 | 1.664 | -0.941 | 0.767 |
| 435T | 0.149 | 1.209 | 1.674 | -0.854 | 1.476 | 1.166 | 0.988 | 1.674 | -0.854 | 0.830 |
| 436V | 0.775 | 1.531 | 2.132 | -0.849 | 2.069 | 1.744 | 1.109 | 2.132 | -0.849 | 1.216 |
| 437R | 1.173 | 1.423 | 1.991 | -0.834 | 2.041 | 1.720 | 1.675 | 2.041 | -0.834 | 1.313 |
| 438D | 1.306 | 1.423 | 2.178 | -1.057 | 2.242 | 2.326 | 1.454 | 2.326 | -1.057 | 1.410 |
| 439K | 0.395 | 1.740 | 1.898 | -1.402 | 2.096 | 2.311 | 1.849 | 2.311 | -1.402 | 1.270 |
| 440V | 0.895 | 1.722 | 2.449 | -1.959 | 2.579 | 2.934 | 1.259 | 2.934 | -1.959 | 1.411 |
| 441R | 1.040 | 2.309 | 2.169 | -2.081 | 2.260 | 2.330 | 1.420 | 2.330 | -2.081 | 1.349 |
| 442L | 0.673 | 1.986 | 2.328 | -2.124 | 2.415 | 2.466 | 1.428 | 2.466 | -2.124 | 1.310 |
| 443R | 0.642 | 2.766 | 2.075 | -1.523 | 1.932 | 1.891 | 1.403 | 2.766 | -1.523 | 1.312 |
| 444S | 1.205 | 1.856 | 2.393 | -1.018 | 2.096 | 1.909 | 0.856 | 2.393 | -1.018 | 1.328 |
| 445R | 1.432 | 0.886 | 2.290 | -0.702 | 1.987 | 1.884 | 0.830 | 2.290 | -0.702 | 1.230 |
| 446T | 1.780 | -0.132 | 2.253 | -0.752 | 1.968 | 1.880 | 0.984 | 2.253 | -0.752 | 1.140 |
| 447T | 1.249 | -0.623 | 1.814 | -1.071 | 1.540 | 1.273 | 0.930 | 1.814 | -1.071 | 0.730 |
| 448E | 0.256 | -0.486 | 1.580 | -1.718 | 1.394 | 1.258 | 1.205 | 1.580 | -1.718 | 0.498 |
| 449V | 0.123 | -1.061 | 1.150 | -2.206 | 0.920 | 0.633 | 0.195 | 1.150 | -2.206 | -0.035 |
| 450M | 0.155 | -0.474 | 0.945 | -2.533 | 0.720 | 0.613 | 0.155 | 0.945 | -2.533 | -0.060 |
| 451L | -0.041 | -0.456 | 0.748 | -2.569 | 0.565 | 0.594 | -0.896 | 0.748 | -2.569 | -0.294 |
| 452A | -0.205 | 0.562 | 0.618 | -2.217 | 0.355 | 0.014 | -0.829 | 0.618 | -2.217 | -0.243 |
| 453G | -0.205 | 0.562 | 0.618 | -1.896 | 0.355 | 0.014 | -0.829 | 0.618 | -1.896 | -0.198 |
| 454A | 0.326 | -0.270 | 1.057 | -1.635 | 0.784 | 0.621 | -0.775 | 1.057 | -1.635 | 0.015 |
| 455T | 1.040 | 0.305 | 1.141 | -1.637 | 0.774 | 0.616 | -2.220 | 1.141 | -2.220 | 0.003 |
| 456V | 0.326 | 0.353 | 1.057 | -1.852 | 0.784 | 0.621 | -0.775 | 1.057 | -1.852 | 0.073 |
| 457R | 0.459 | 1.058 | 1.393 | -2.165 | 1.194 | 1.221 | -0.801 | 1.393 | -2.165 | 0.337 |
| 458A | 0.958 | 0.736 | 1.664 | -2.048 | 1.513 | 1.710 | 0.200 | 1.710 | -2.048 | 0.676 |
| 459L | 1.072 | 0.532 | 1.767 | -1.310 | 1.668 | 1.731 | 0.046 | 1.767 | -1.310 | 0.786 |
| 460E | 1.634 | 0.640 | 2.085 | -0.063 | 1.832 | 1.749 | -0.502 | 2.085 | -0.502 | 1.054 |
| 461D | 0.787 | -0.140 | 1.571 | 1.100 | 1.367 | 1.130 | -0.066 | 1.571 | -0.140 | 0.821 |
| 462N | 0.421 | -0.188 | 1.449 | 1.433 | 1.358 | 1.131 | 1.533 | 1.533 | -0.188 | 1.020 |
| 463T | 0.421 | -0.707 | 1.449 | 0.716 | 1.358 | 1.131 | 1.533 | 1.533 | -0.707 | 0.843 |
| 464L | 0.256 | -0.623 | 1.318 | -0.388 | 1.148 | 0.552 | 1.600 | 1.600 | -0.623 | 0.552 |
| 465V | -0.243 | 0.437 | 1.206 | -0.922 | 1.002 | 0.683 | 1.876 | 1.876 | -0.922 | 0.577 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 466L | -0.193 | 0.534 | 1.234 | -0.827 | 1.057 | 1.242 | 1.963 | 1.963 | -0.827 | 0.716 |
| 467T | -0.111 | 1.097 | 1.188 | 0.087 | 1.057 | 1.242 | 2.082 | 2.082 | -0.111 | 0.949 |
| 468H | 0.604 | 0.401 | 1.272 | 0.624 | 1.048 | 1.236 | 0.637 | 1.272 | 0.401 | 0.832 |
| 469E | 0.971 | 0.311 | 1.636 | 0.791 | 1.330 | 1.254 | 0.268 | 1.636 | 0.268 | 0.937 |
| 470S | 0.971 | 0.550 | 1.636 | 0.348 | 1.330 | 1.254 | 0.268 | 1.636 | 0.268 | 0.908 |
| 471A | 0.775 | 0.507 | 1.440 | -0.166 | 1.175 | 1.234 | -0.783 | 1.440 | -0.783 | 0.598 |
| 472P | 0.907 | 0.303 | 1.711 | -0.967 | 1.476 | 1.239 | -1.051 | 1.711 | -1.051 | 0.517 |
| 473L | 0.680 | 0.800 | 1.814 | -1.489 | 1.586 | 1.264 | -1.025 | 1.814 | -1.489 | 0.518 |
| 474A | -0.313 | 1.579 | 1.580 | -2.172 | 1.440 | 1.249 | -0.750 | 1.580 | -2.172 | 0.373 |
| 475R | -0.035 | 2.070 | 1.730 | -2.206 | 1.595 | 1.269 | 0.420 | 2.070 | -2.206 | 0.692 |
| 476R | 0.326 | 2.070 | 1.814 | -2.091 | 1.686 | 1.850 | 0.173 | 2.070 | -2.091 | 0.832 |
| 477L | 1.287 | 1.866 | 2.225 | -1.466 | 2.050 | 1.887 | -0.098 | 2.225 | -1.466 | 1.107 |
| 478S | 1.420 | 2.070 | 2.655 | -1.101 | 2.524 | 2.511 | 0.911 | 2.655 | -1.101 | 1.570 |
| 479E | 1.597 | 1.754 | 2.524 | -0.533 | 2.360 | 1.927 | 0.799 | 2.524 | -0.533 | 1.490 |
| 480Q | 1.464 | 1.082 | 2.094 | -0.310 | 1.886 | 1.303 | -0.210 | 2.094 | -0.310 | 1.044 |
| 481R | 2.678 | 0.387 | 2.449 | 0.386 | 2.196 | 1.786 | -0.654 | 2.678 | -0.654 | 1.318 |
| 482N | 2.033 | -0.426 | 2.178 | 0.627 | 2.032 | 1.768 | -0.225 | 2.178 | -0.426 | 1.141 |
| 483A | 0.958 | -0.460 | 1.767 | 0.749 | 1.677 | 1.173 | 0.236 | 1.767 | -0.460 | 0.871 |
| 484D | 0.711 | -0.460 | 1.440 | 0.079 | 1.303 | 1.131 | -0.938 | 1.440 | -0.938 | 0.467 |
| 485V | 0.939 | -1.204 | 1.337 | -0.684 | 1.194 | 1.106 | -0.963 | 1.337 | -1.204 | 0.246 |
| 486L | 0.629 | -0.276 | 1.038 | -1.673 | 0.884 | 1.065 | -1.860 | 1.065 | -1.860 | -0.027 |
| 487A | -0.085 | 0.467 | 0.954 | -2.065 | 0.893 | 1.071 | -0.415 | 1.071 | -2.065 | 0.117 |
| 488E | -0.357 | 0.467 | 1.132 | -2.396 | 1.212 | 1.176 | -0.341 | 1.212 | -2.396 | 0.128 |
| 489A | 0.509 | -0.312 | 1.524 | -2.128 | 1.540 | 1.664 | -0.939 | 1.664 | -2.128 | 0.265 |
| 490L | 1.224 | 0.315 | 1.608 | -1.781 | 1.531 | 1.658 | -2.384 | 1.658 | -2.384 | 0.310 |
| 491K | 0.509 | 0.423 | 1.524 | -1.307 | 1.540 | 1.664 | -0.939 | 1.664 | -1.307 | 0.488 |
| 492D | 0.376 | 0.201 | 1.188 | -1.049 | 1.130 | 1.064 | -0.912 | 1.188 | -1.049 | 0.285 |
| 493A | 0.010 | -0.841 | 1.066 | -1.156 | 1.121 | 1.066 | 0.687 | 1.121 | -1.156 | 0.279 |
| 494L | 1.034 | -0.028 | 1.449 | -1.077 | 1.422 | 1.101 | 0.139 | 1.449 | -1.077 | 0.577 |
| 495G | 0.041 | 0.081 | 1.019 | -0.837 | 0.802 | 0.532 | 0.096 | 1.019 | -0.837 | 0.248 |
| 496V | -0.325 | 0.267 | 1.178 | -0.434 | 0.957 | 0.667 | 0.104 | 1.178 | -0.434 | 0.345 |
| 497N | -0.692 | 0.399 | 1.057 | -0.257 | 0.948 | 0.669 | 1.703 | 1.703 | -0.692 | 0.547 |
| 498W | 0.155 | 0.365 | 1.571 | -0.675 | 1.412 | 1.288 | 1.267 | 1.571 | -0.675 | 0.769 |
| 499R | -0.117 | 1.359 | 1.365 | -1.325 | 1.367 | 1.306 | 1.889 | 1.889 | -1.325 | 0.835 |
| 500V | 0.610 | 1.173 | 1.814 | -1.671 | 1.741 | 1.904 | 1.274 | 1.904 | -1.671 | 0.978 |
| 501R | 0.496 | 1.844 | 1.711 | -1.633 | 1.586 | 1.883 | 1.428 | 1.883 | -1.633 | 1.045 |
| 502C | 1.489 | 1.389 | 1.683 | -1.240 | 1.522 | 1.858 | 1.406 | 1.858 | -1.240 | 1.158 |
| 503E | 1.717 | 1.353 | 1.580 | -1.018 | 1.412 | 1.833 | 1.380 | 1.833 | -1.018 | 1.180 |
| 504T | 2.083 | 0.778 | 1.945 | -0.987 | 1.695 | 1.850 | 1.012 | 2.083 | -0.987 | 1.197 |
| 505G | 1.951 | 0.287 | 1.515 | -1.033 | 1.221 | 1.226 | 0.002 | 1.951 | -1.033 | 0.738 |
| 506E | 1.995 | -0.340 | 1.730 | -1.172 | 1.312 | 1.208 | -1.630 | 1.995 | -1.630 | 0.443 |
| 507P | 1.634 | -0.060 | 1.403 | -1.249 | 0.948 | 0.608 | -2.614 | 1.634 | -2.614 | 0.096 |
| 508A | 1.438 | -0.060 | 1.206 | -1.503 | 0.793 | 0.588 | -3.665 | 1.438 | -3.665 | -0.172 |
| 509A | 1.489 | -0.156 | 1.365 | -1.536 | 0.993 | 0.608 | -3.505 | 1.489 | -3.505 | -0.106 |
| 510A | 1.129 | 0.471 | 1.281 | -1.238 | 0.902 | 0.028 | -3.259 | 1.281 | -3.259 | -0.098 |
| 511A | 0.762 | 1.099 | 0.917 | -0.782 | 0.619 | 0.010 | -2.890 | 1.099 | -2.890 | -0.038 |
| 512S | 0.990 | 1.726 | 0.907 | -0.310 | 0.574 | 0.010 | -1.880 | 1.726 | -1.880 | 0.288 |
| 513P | 1.217 | 0.870 | 0.898 | -0.300 | 0.528 | 0.010 | -0.869 | 1.217 | -0.869 | 0.336 |
| 514V | 1.445 | 1.121 | 0.889 | -0.716 | 0.483 | 0.010 | 0.141 | 1.445 | -0.716 | 0.482 |
| 515G | 1.445 | 1.121 | 0.889 | -1.213 | 0.483 | 0.010 | 0.141 | 1.445 | -1.213 | 0.411 |
| 516G | 1.476 | 0.493 | 1.038 | -1.166 | 0.638 | 0.031 | -0.132 | 1.476 | -1.166 | 0.340 |
| 517G | 1.110 | 0.357 | 0.674 | -0.828 | 0.355 | 0.014 | 0.237 | 1.110 | -0.828 | 0.274 |
| 518A | 1.476 | -0.270 | 0.795 | -0.180 | 0.364 | 0.012 | -1.362 | 1.476 | -1.362 | 0.119 |
| 519N | 1.445 | 0.562 | 1.001 | 0.112 | 0.565 | 0.032 | -1.321 | 1.445 | -1.321 | 0.342 |
| 520V | 1.217 | -0.048 | 1.010 | -0.082 | 0.610 | 0.032 | -2.332 | 1.217 | -2.332 | 0.058 |
| 521A | 1.217 | -0.048 | 1.468 | -0.685 | 1.294 | 0.627 | -2.267 | 1.468 | -2.267 | 0.229 |
| 522T | 1.217 | 0.562 | 1.468 | -1.203 | 1.294 | 0.627 | -2.267 | 1.468 | -2.267 | 0.242 |
| 523A | 0.541 | 0.429 | 1.047 | -1.805 | 0.975 | 0.588 | -1.565 | 1.047 | -1.805 | 0.030 |
| 524K | 1.217 | 0.429 | 1.468 | -1.566 | 1.294 | 0.627 | -2.267 | 1.468 | -2.267 | 0.172 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 525A | 1.217 | -0.044 | 1.711 | -0.968 | 1.567 | 0.646 | -1.037 | 1.711 | -1.037 | 0.442 |
| 526V | 1.021 | 0.447 | 1.515 | -0.083 | 1.412 | 0.626 | -2.088 | 1.515 | -2.088 | 0.407 |
| 527N | 1.021 | 0.544 | 1.758 | 0.705 | 1.686 | 0.645 | -0.858 | 1.758 | -0.858 | 0.786 |
| 528P | 0.990 | 0.544 | 1.505 | 0.914 | 1.203 | 0.070 | -0.882 | 1.505 | -0.882 | 0.621 |
| 529A | 0.990 | 1.040 | 1.505 | 0.503 | 1.203 | 0.070 | -0.882 | 1.505 | -0.882 | 0.633 |
| 530P | 1.666 | 1.531 | 1.926 | 0.446 | 1.522 | 0.109 | -1.584 | 1.926 | -1.584 | 0.802 |
| 531T | 1.634 | 1.664 | 1.776 | 0.564 | 1.367 | 0.088 | -1.311 | 1.776 | -1.311 | 0.826 |
| 532A | 1.830 | 1.986 | 1.730 | 1.225 | 1.248 | 0.089 | -1.490 | 1.986 | -1.490 | 0.946 |
| 533N | 2.077 | 2.525 | 2.057 | 1.778 | 1.622 | 0.132 | -0.317 | 2.525 | -0.317 | 1.411 |
| 534S | 2.210 | 2.491 | 2.244 | 1.621 | 1.823 | 0.737 | -0.538 | 2.491 | -0.538 | 1.513 |
| 535T | 2.513 | 2.211 | 2.318 | 1.087 | 1.987 | 1.206 | -0.587 | 2.513 | -0.587 | 1.534 |
| 536Q | 2.874 | 2.295 | 2.646 | 0.365 | 2.351 | 1.806 | 0.397 | 2.874 | 0.365 | 1.819 |
| 537R | 2.924 | 1.894 | 2.674 | -0.277 | 2.406 | 2.365 | 0.483 | 2.924 | -0.277 | 1.781 |
| 538D | 3.006 | 0.966 | 2.851 | -0.731 | 2.615 | 2.944 | 0.297 | 3.006 | -0.731 | 1.707 |
| 539E | 2.810 | 0.223 | 2.814 | -0.746 | 2.634 | 3.544 | 0.524 | 3.544 | -0.746 | 1.686 |
| 540E | 2.166 | -0.352 | 2.477 | -0.901 | 2.306 | 3.519 | 0.305 | 3.519 | -0.901 | 1.360 |
| 541E | 1.318 | -0.352 | 1.963 | -0.659 | 1.841 | 2.900 | 0.741 | 2.900 | -0.659 | 1.108 |
| 542H | 0.819 | -0.927 | 1.692 | -0.828 | 1.522 | 2.411 | -0.260 | 2.411 | -0.927 | 0.633 |
| 543M | 0.819 | -0.390 | 1.692 | -1.129 | 1.522 | 2.411 | -0.260 | 2.411 | -1.129 | 0.666 |
| 544L | 0.459 | 0.538 | 1.365 | -1.745 | 1.157 | 1.811 | -1.244 | 1.811 | -1.745 | 0.334 |
| 545A | 0.326 | 1.369 | 1.029 | -2.073 | 0.747 | 1.212 | -1.217 | 1.369 | -2.073 | 0.199 |
| 546E | 0.459 | 1.908 | 1.300 | -2.362 | 1.048 | 1.217 | -1.486 | 1.908 | -2.362 | 0.298 |
| 547A | 1.084 | 1.692 | 1.300 | -2.209 | 0.957 | 1.199 | -1.430 | 1.692 | -2.209 | 0.370 |
| 548G | 2.298 | 2.547 | 1.655 | -1.869 | 1.267 | 1.683 | -1.874 | 2.547 | -1.874 | 0.815 |
| 549R | 2.298 | 2.279 | 1.898 | -1.303 | 1.540 | 1.702 | -0.644 | 2.298 | -1.303 | 1.110 |
| 550G | 2.216 | 2.279 | 1.720 | -0.327 | 1.330 | 1.122 | -0.458 | 2.279 | -0.458 | 1.126 |
| 551D | 2.216 | 2.465 | 1.963 | 0.652 | 1.604 | 1.141 | 0.772 | 2.465 | 0.652 | 1.545 |
| 552P | 2.121 | 2.465 | 2.403 | 1.144 | 2.123 | 1.766 | 0.771 | 2.465 | 0.771 | 1.828 |
| 553S | 2.121 | 2.465 | 2.403 | 0.906 | 2.123 | 1.766 | 0.771 | 2.465 | 0.771 | 1.794 |
| 554P | 2.393 | 2.184 | 2.683 | 0.355 | 2.488 | 2.255 | 0.762 | 2.683 | 0.355 | 1.874 |
| 555R | 1.894 | 2.401 | 2.655 | -0.247 | 2.442 | 1.785 | 0.991 | 2.655 | -0.247 | 1.703 |
| 556R | 2.254 | 1.491 | 2.739 | -0.345 | 2.533 | 2.366 | 0.745 | 2.739 | -0.345 | 1.683 |
| 557D | 2.336 | 0.678 | 2.917 | -0.293 | 2.743 | 2.945 | 0.558 | 2.945 | -0.293 | 1.698 |
| 558P | 1.970 | -0.066 | 2.552 | -0.471 | 2.461 | 2.928 | 0.927 | 2.928 | -0.471 | 1.471 |
| 559E | 1.837 | 0.151 | 2.122 | -1.006 | 1.987 | 2.303 | -0.082 | 2.303 | -1.006 | 1.044 |
| 560E | 0.990 | -0.629 | 1.608 | -1.645 | 1.522 | 1.684 | 0.354 | 1.684 | -1.645 | 0.555 |
| 561V | 0.850 | -1.408 | 1.664 | -2.179 | 1.567 | 1.794 | 0.336 | 1.794 | -2.179 | 0.375 |
| 562A | 0.136 | -0.821 | 1.337 | -2.399 | 1.303 | 1.781 | 0.551 | 1.781 | -2.399 | 0.270 |
| 563L | -0.939 | -0.212 | 0.926 | -2.457 | 0.948 | 1.187 | 1.013 | 1.187 | -2.457 | 0.066 |
| 564E | -1.053 | 0.568 | 0.926 | -2.391 | 0.957 | 0.630 | 1.202 | 1.202 | -2.391 | 0.120 |
| 565L | -0.376 | -0.212 | 1.346 | -1.787 | 1.276 | 0.669 | 0.501 | 1.346 | -1.787 | 0.202 |
| 566L | -0.016 | 0.620 | 1.674 | -1.001 | 1.640 | 1.268 | 1.484 | 1.674 | -1.001 | 0.810 |
| 567Q | -0.016 | 0.824 | 1.674 | -0.122 | 1.640 | 1.268 | 1.484 | 1.674 | -0.122 | 0.965 |
| 568N | -0.148 | 1.147 | 1.337 | 0.157 | 1.230 | 0.669 | 1.511 | 1.511 | -0.148 | 0.843 |
| 569E | 0.566 | 1.351 | 1.421 | -0.263 | 1.221 | 0.663 | 0.066 | 1.421 | -0.263 | 0.718 |
| 570L | 1.413 | 0.451 | 1.935 | -1.127 | 1.686 | 1.282 | -0.370 | 1.935 | -1.127 | 0.753 |
| 571G | 1.299 | 1.195 | 2.038 | -1.842 | 1.786 | 1.865 | -0.534 | 2.038 | -1.842 | 0.829 |
| 572A | 0.351 | 1.177 | 1.599 | -2.485 | 1.458 | 1.826 | -0.099 | 1.826 | -2.485 | 0.547 |
| 573R | 0.490 | 1.177 | 1.543 | -2.389 | 1.412 | 1.715 | -0.082 | 1.715 | -2.389 | 0.552 |
| 574R | 1.514 | 0.618 | 1.926 | -1.709 | 1.713 | 1.751 | -0.630 | 1.926 | -1.709 | 0.740 |
| 575I | 1.287 | 0.059 | 1.935 | -0.647 | 1.759 | 1.751 | -1.640 | 1.935 | -1.640 | 0.643 |
| 576D | 1.154 | 0.638 | 1.477 | 0.564 | 2.078 | 1.811 | -1.640 | 2.078 | -1.640 | 0.869 |
| 577N | 0.888 | 0.353 | 0.589 | 1.124 | 1.923 | 1.246 | -2.650 | 1.923 | -2.650 | 0.496 |
| 578A | 0.623 | -0.001 | -0.298 | 0.884 | 1.768 | 0.681 | -3.659 | 1.768 | -3.659 | -0.000 |

TOP

---

---

**Overlap Display**

**Selected Programs: hydro flexi access turns surface polar antipro**

**Respective Threshold: 1.9 2 1.9 2.4 2.3 1.8 1.9**

**The predicted B-cell epitopes are shown in blue colour and underlined.**

| | |
|---|---|
| Sequence | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |
| Hydrophilicity | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |
| Flexibility | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |
| Accessibility | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |

| | |
|---|---|
| Turns | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |
| Exposed Surface | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |
| Polarity | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |
| Antigenic Propensity | [1]MALYRKYRPASFAEVVGQEHVTAPLSVALDAGRINHAYLFSGPRGCGKTSSARILARSLNCAQGPT<br>ANPCGVCESCVSLAPNAPGSIDVVELDAASHGGVDDTRELRDRAFYAPVQSRYRVFIVDEAHMVTT<br>AGFNALLKIVEEPPEHLIFIFATTEPEKVLPTIRSRTHHYPFRLLPPRTMRALLARICEQEGVVVDDAVY<br>PLVIRAGGGSPRDTLSVLDQLLAGAADTHVTYTRALGLLGVTDVALIDDAVDALAACDAAALFGAIES<br>VIDGGHDPRRFATDLLERFRDLIVLQSVPDAASRGVVDAPEDALDRMREQAARIGRATLTRYAEVVQ<br>AGLGEMRGATAPRLLLEVVCARLLLPSASDAESALLQRVERIETRLDMSIPAPQAVPRPSAAAAEPK<br>HQPAREPRPVLAPTPASSEPTVAAVRSMWPTVRDKVRLRSRTTEVMLAGATVRALEDNTLVLTHES<br>APLARRLSEQRNADVLAEALKDALGVNWRVRCETGEPAAAASPVGGGANVATAKAVNPAPTANST<br>QRDEEEHMLAEAGRGDPSPRRDPEEVALELLQNELGARRIDNA[578] |

**TOP**

**Home**