|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Protein aggregation | Amyloid aggregation | Hsp70 chaperone binding |
| Motif | Mutation | dTANGO | Effect | dWALTZ | Effect | dLIMBO | Effect |
| Walker A | P37A  | 40.42 | No | 0.02 | No | 0.00 | No |
| N38A | 3.70 | No  | 0.00 | No  | 0.00 | No  |
| G41D | 8.06 | No  | 0.00 | No | 0.00 | No |
| K42R | -0.01 | No | -0.04 | No | 0.00 | No |
| K42M | 10.38 | No | 0.15 | No | 0.00 | No |
| K42E | -2.73 | No | 0.09 | No | 0.00 | No |
| K42A | 8.30 | No | 0.83 | No | 0.00 | No |
| Q-loop | Q159H | 0.00 | No | -0.46 | No | 0.00 | No |
| Zinc hook | S635A | 0.00 | No | 0.00 | No | 0.00 | No |
| S635G | 0.00 | No  | 0.00 | No  | 0.00 | No  |
| S679R | 0.69 | No  | -0.08 | No  | 0.00 | No  |
| C680G | 0.00 | No | 0.00 | No | 0.00 | No |
| C680N | 0.00 | No | 0.00 | No | 0.00 | No |
| C681G | 0.00 | No | 0.00 | No | 0.00 | No |
| C681A | 0.00 | No | 0.00 | No | 0.00 | No |
| C681S | 0.00 | No  | 0.00 | No  | 0.00 | No  |
| P682R | 0.69 | No  | -0.07 | No  | 0.00 | No  |
| P682E | 0.00 | No | 0.00 | No | 0.00 | No |
| P682A | 0.00 | No | 0.00 | No | 0.00 | No |
| V683R | 0.69 | No | -0.07 | No | 0.00 | No |
| V683I | 0.00 | No | 0.00 | No | 0.00 | No |
| C684G | 0.00 | No | 0.09 | No | 0.00 | No |
| C684A | 0.00 | No  | 0.22 | No  | 0.00 | No  |
| C684R | 0.69 | No  | -0.07 | No  | 0.00 | No  |
| C684S | 0.00 | No | 0.02 | No | 0.00 | No |
| Q685S | 0.00 | No | 0.00 | No | 0.00 | No |
| R686A | 3.44 | No | 0.10 | No | 0.00 | No |
| Signature motif | S1202A  | -0.01 | No  | 0.00 | No | 0.00 | No |
| S1202R  | 2.50 | No | 0.03 | No  | 0.00 | No |
| S1202M  | 0.32 | No | 0.00 | No  | 0.00 | No  |
| A1203G  | 2.71 | No | 0.21 | No | 0.00 | No  |
| Q1205E  | 335.75 | Increase | -53.71 | Decrease | 0.00 | No |
| K1206M  | 345.28 | Increase | -47.87 | Decrease | 0.00 | No |
| K1206A  | 314.83 | Increase | -43.90 | Decrease | 0.00 | No |
| K1206E | 89.21 | Increase | -42.36 | Decrease | 0.00 | No |
| K1206G | 194.91 | Increase | -29.05 | No | 0.00 | No |
| L1211W  | 267.65 | Increase | 167.86 | Increase | 0.00 | No |
| R1214A  | 546.66 | Increase | -69.23 | Decrease | 0.00 | No |
| R1214E  | 61.87 | Increase | -29.29 | No | 0.00 | No |
| R1214L | 550.59 | Increase | -87.31 | Decrease | 0.00 | No |
| R1214W | 557.4 | Increase | -91.52 | Decrease | 0.00 |  |
| L1215F  | 245.42 | Increase | -21.64 | No | 0.00 | No |
| Walker B | D1231N | 6.74 | No | -0.04 | No | 0.00 | No |
| E1232Q | 4.37 | No  | -0.25 | No | 00.0 | No  |
| D-loop | D1238N  | 0.02 | No | 0.73 | No | 0.00 | No  |
| D1238A  | 0.05 | No | 1.63 | No  | 0.00 | No |
| E1240Q  | 0.03 | No | 0.96 | No  | 0.00 | No |
| N1241A | -0.09 | No  | -3.30 | No | 0.00 | No |
| ATPase domain | K6E  | 6.36 | No  | 0.07 | No  | 0.00 | No  |
| S14P  | 0.00 | No | 0.00 | No  | 0.00 | No  |
| K22M  | 64.69 | Increase | -12.71 | No  | 0.00 | No  |
| Q23K  | -161.56 | Decrease | -1.60 | No  | 0.00 | No  |
| T65E  | 0.00 | No | -0.41 | No  | 0.00 | No  |
| Q81K  | 0.69 | No | -0.07 | No  | 0.00 | No  |
| R83I  | 182.74 | Increase | 58.48 | Increase | 0.00 | No |
| S99P  | 0.12 | No  | 0.11 | No | 0.00 | No |
| V101K  | 0.64 | No  | -0.11 | No | 0.00 | No |
| Q174A  | 0.00 | No | 0.43 | No | 0.00 | No |
| T191D | -0.07 | No | -1.69 | No | 0.00 | No |
| Q194S | 0.02 | No | 0.21 | No | 0.00 | No |
| M208C | 0.00 | No | -1.85 | No | 0.00 | No |
| K256P | -0.69 | No | 0.17 | No | 0.00 | No |
| M293A | 0.00 | No | 0.01 | No | 0.00 | No |
| S603Y | 0.00 | No | 9.87 | No | 0.00 | No |
| K921V | -0.69 | No | 0.29 | No | 0.00 | No |
| L673V | 11.74 | No | -0.21 | No | 0.00 | No |
| L694Q | 0.00 | No | -5.74 | No | 0.00 | No  |
| V697F | 0.00 | No | 239.39 | Increase | 0.00 | No |
| Q886I | 0.00 | No  | 0.00 | No  | 0.00 | No |
| S936P | 0.00 | No | -0.06 | No | 0.00 | No |
| C990S | 0.49 | No | 0.00 | No | 0.00 | No |
| N1028P | 0.00 | No | 0.00 | No | 0.00 | No |
| K132E  | -0.69 | No | 0.01 | No | 0.00 | No |
| T191E  | -0.13 | No | -2.90 | No | 0.00 | No |
| C221E  | 0.00 | No | 0.00 | No | 0.00 | No |
| K105E  | -0.68 | No | 0.07 | No | 0.00 | No |
| S106E  | 0.02 | No | 0.00 | No | 0.00 | No |
| G1199E  | -0.99 | No | 0.00 | No | 0.00 | No |
| E110K  | -1.00 | No | -0.07 | No | 0.00 | No |
| K126E  | -0.69 | No | 0.06 | No | 0.00 | No |
| V127E  | 0.00 | No | -0.01 | No | 0.00 | No |
| K122E  | -0.68 | No | 0.07 | No | 0.00 | No |
| R1198E  | -0.69 | No | 0.07 | No | 0.00 | No |
| Y1184R | 0.69 | No | -0.15 | No | 0.00 | No |
| SNPs | K616E  | -0.69 | No | 0.08 | No | 0.00 | No |
| T191I  | 1.56 | No  | 0.73 | No  | 0.00 | No  |
| R1038G  | -0.69 | No  | 0.07 | No  | 0.00 | No  |
| K973M  | -0.25 | No  | 0.07 | No  | 0.00 | No  |
| V842A  | 0.00 | No  | 0.02 | No  | 0.00 | No  |
| V127I  | 0.00 | No  | 0.06 | No  | 0.00 | No  |
| V697A  | 0.00 | No | 55.56 | Increase | 0.00 | No |
| R224H  | -0.61 | No | 0.28 | No | 0.00 | No |
| Y964H | 0.08 | No | -111.51 | Decrease | 0.00 | No |
| R193W  | 7.11 | No | 0.71 | No | 0.00 | No |
| I94L  | -9.52 | No | -18.37 | No | 0.00 | No |
| G469A  | 0.00 | No | 0.29 | No | 0.00 | No |
| V315L | 0.00 | No | 0.00 | No | 0.00 | No |