|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Pfam ID** | **# Highly covarying design pairs** | **# Highly covarying natural pairs** | **# Total pairs** | **# Overlap pairs** | **Percent overlap** | **P-value** |
| PF00013 | 48 | 59 | 1431 | 20 | 37 | 0 |
| PF00018 | 37 | 39 | 946 | 13 | 34 | 1.0678e-11 |
| PF00041 | 81 | 59 | 2016 | 28 | 40 | 0 |
| PF00072 | 263 | 167 | 5886 | 65 | 30 | 0 |
| PF00076 | 86 | 72 | 1653 | 41 | 52 | 0 |
| PF00085 | 154 | 104 | 4095 | 46 | 36 | 0 |
| PF00111 | 57 | 56 | 1326 | 13 | 23 | 2.1442e-08 |
| PF00168 | 98 | 79 | 2415 | 25 | 28 | 0 |
| PF00169 | 143 | 132 | 3916 | 38 | 28 | 0 |
| PF00179 | 339 | 232 | 9045 | 61 | 21 | 0 |
| PF00226 | 60 | 44 | 1275 | 19 | 37 | 1.1102e-16 |
| PF00240 | 69 | 67 | 1830 | 15 | 22 | 7.2148e-10 |
| PF00249 | 33 | 39 | 820 | 9 | 25 | 7.6141e-07 |
| PF00254 | 120 | 106 | 3403 | 35 | 31 | 0 |
| PF00313 | 78 | 59 | 1953 | 20 | 29 | 4.4409e-16 |
| PF00327 | 53 | 54 | 1326 | 20 | 37 | 0 |
| PF00355 | 158 | 85 | 3655 | 22 | 18 | 3.0109e-13 |
| PF00364 | 88 | 83 | 2211 | 28 | 33 | 0 |
| PF00381 | 150 | 116 | 3486 | 42 | 32 | 0 |
| PF00439 | 95 | 95 | 2628 | 22 | 23 | 3.8303e-14 |
| PF00486 | 104 | 74 | 2346 | 27 | 30 | 0 |
| PF00498 | 77 | 60 | 1891 | 24 | 35 | 0 |
| PF00542 | 80 | 93 | 2278 | 32 | 37 | 0 |
| PF00550 | 75 | 64 | 1596 | 10 | 14 | 1.1737e-04 |
| PF00581 | 131 | 105 | 3081 | 36 | 31 | 0 |
| PF00582 | 300 | 200 | 7140 | 65 | 26 | 0 |
| PF00595 | 105 | 83 | 2701 | 17 | 18 | 8.9649e-10 |
| PF00691 | 153 | 101 | 3240 | 48 | 38 | 0 |
| PF00708 | 146 | 112 | 3741 | 46 | 36 | 0 |
| PF01029 | 228 | 195 | 6328 | 47 | 22 | 0 |
| PF01035 | 107 | 98 | 3003 | 27 | 26 | 0 |
| PF01451 | 231 | 195 | 6328 | 44 | 21 | 0 |
| PF01627 | 89 | 93 | 2346 | 24 | 26 | 3.3307e-16 |
| PF01833 | 95 | 80 | 2556 | 25 | 29 | 0 |
| PF02823 | 112 | 87 | 2926 | 28 | 28 | 0 |
| PF04002 | 265 | 215 | 7381 | 65 | 27 | 0 |
| PF07679 | 64 | 55 | 1653 | 22 | 37 | 0 |
| PF07686 | 81 | 66 | 2080 | 13 | 18 | 9.0498e-08 |
| PF08666 | 66 | 62 | 1485 | 19 | 30 | 1.0469e-13 |
| PF12844 | 84 | 76 | 1953 | 28 | 35 | 0 |