**S2 Table. PTMC simulation parameters and results for BAR domains.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Protein | PDB ID | SCD(C m-2) | IS(M) | Dipolemoment (D) | Uele(kcal mol-1) | Uvdw(kcal mol-1) | Utot(kcal mol-1) | cosθ |
| ACAP1BAR-PH | 5H3D\* | -0.07 | 0.18 | 1236.2 | -41.18 | -16.87 | -58.05 | 0.7 |
| -0.127 | -61.95 | -10.49 | -72.44 | -0.9 |
| EndophilinN-BAR | 1X03 | -0.07 | 0.15 | 1537.1 | -132.91 | -13.55 | -146.46 | -0.9 |
| -0.127 | -244.90 | -13.19 | -258.10 | -0.9 |
| F-BAR | 2EFK | -0.07 | 0.15 | 640.3 | -34.94 | -32.36 | -67.30 | -0.4 |
| -0.127 | -63.65 | -32.27 | -95.91 | -0.4 |
| I-BAR | 1WDZ | -0.07 | 0.15 | 1004.3 | -144.43 | -29.66 | -174.09 | -0.7 |
| -0.125 | -258.50 | -29.64 | -288.14 | -0.7 |

**\*This publication**