**Table S2**. Comparative structural analysis of the distances between the M protein membrane-proximal helices (H1) of the two M proteins at the heterotetramer interface.

|  |  |  |  |
| --- | --- | --- | --- |
| Virus | PDB | H1-H1 distance at the heterotetramer interface (Å) | Reference |
| Tick-borne encephalitis (Kuutsalo-14) | 7Z51 | 19.1 | - |
| Chimeric flavivirus between Binjari and Murray Valley Encephalitis | 7KVB | 29.2 | [17] |
| Chimeric flavivirus between Binjari and West Nile (Kunjin) | 7KV9 | 30.9 | [17] |
| Chimeric flavivirus between Binjari and Dengue serotype-2 | 7KV8 | 32.9 | [17] |
| Dengue virus serotype-2 | 6ZQU | 32.7 | [19] |
| Dengue virus serotype-2 | 7V3F | 28.9 | [64] |
| Dengue virus serotype-2 | 3J27 | 31.6 | [65] |
| Spondweni | 6ZQV | 32.1 | [19] |
| Tick-borne encephalitis (Hypr) | 5O6A | 25.7 | [4] |
| Usutu | 7LCH | 36.7 | [18] |
| Usutu | 7LCG | 36.6 | [18] |
| West Nile virus (Kunjin) | 7KVA | 38.6 | [17] |
| Zika | 6CO8 | 35.2 | [46] |
| Zika | 5IZ7 | 28.6 | [66] |
| Zika | 5IRE | 35.3 | [67] |