

**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.

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