**Table S7.**  **Comparison of Cα rmsd values (Å) of A/bat/Peru/10 HA (crystal 1) with other influenza A virus HAsa.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | Crystal 1  (PDB code AA) | | Crystal 2 (PDB code BB) | |
| Group | Subtype | Strain name | PDB code | HA1 | HA2 | HA1 | HA2 |
| 1 | H1 | A/South Carolina/1/1918 | 1RD8 | 1.4 | 1.2 | 1.4 | 1.1 |
| 1 | H1 | A/Darwin/2001/2009 | 3M6S | 1.3 | 0.7 | 1.4 | 0.8 |
| 1 | H1 | A/swine/Indiana/P12439/00 | 4F3Z | 1.5 | 0.9 | 1.5 | 0.9 |
| 1 | H2 | A/Singapore/ 1/57 | 2WR7 | 1.4 | 0.8 | 1.4 | 0.8 |
| 1 | H5 | A/Vietnam/1203/2004 | 2FK0 | 1.6 | 0.9 | 1.6 | 0.8 |
| 1 | H9 | A/swine/Hong Kong/9/98 | 1JSD | 1.9 | 1.0 | 1.9 | 1.0 |
| 2 | H3 | A/Hong Kong/19/1968 | 2HMG | 2.2 | 1.3 | 2.1 | 1.3 |
| 2 | H7 | A/Netherland/219/2003 | 4DJ6 | 2.1 | 1.3 | 2.2 | 1.3 |
| 2 | H14 | A/mallard/Astrakhan/263/1982 | 3EYJ | 2.0 | 1.3 | 2.0 | 1.3 |

aTo analyze differences in the overall structure, Cα r.m.s.d. values (Å) were calculated between the HA1 and HA2 subdomains of different HAs superimposed by sequential and structural alignment onto the equivalent domains of A/bat/Peru/10 HA.