|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Design | Tailored Antigens | Experimental Molecular Weight (kDa) | Target Molecular Weight (kDa) | SAXS *X* value | Resolution, backbone r.m.s.d.  structure (Å, Å) |
| 1na0C3\_2 | HA, SOSIP, DS-Cav1 | 48 | 45 | 1.4 | 2.6, 1.4 |
| 3ltjC3\_1v2 | SOSIP, DS-Cav1 | 56 | 63 | 1.1 | 2.3, 0.8 |
| 3ltjC3\_11 | SOSIP, DS-Cav1 | 50 | 66 | 1.6 | -- |
| HR04C3\_5v2 | SOSIP | 71 | 69 | 1.5 | -- |
| T33\_dn2 | HA, SOSIP, DS-Cav1 | 397 | 345 | 4.8 | -- |
| T33\_dn5 | HA, SOSIP, DS-Cav1 | 422 | 422 | 1.7 | -- |
| T33\_dn10 | HA, SOSIP, DS-Cav1 | 546 | 556 | 2.3 | 3.9, 0.65 |
| O43\_dn18 | HA,SOSIP, DS-Cav1 | 810 | 876 | 2.9 | 4.5, 0.98 |
| I53\_dn5 | HA, SOSIP, DS-Cav1 | 2000 | 1960 | 1.2 | 5.3, 1.30 |

**Table 1.** **Summary of the experimental characterization for designed trimers and two-component nanoparticles.** 1na0C3\_2 and 3ltjC3\_1v2 structures determined by X-ray crystallography and T33\_dn10, O43\_dn18, and I53\_dn5 structures determined by cryo-EM.