

Description of Additional Supplementary Files

File Name: Supplementary Movie 1.

Description: Env trimer twisting. The B41 SOSIP.664 trimers from the 3.5Å (red) and 3.8Å (grey) resolution structures were aligned on their gp41 C α coordinates to reveal twisting of the gp120 subunits relative to each other. Alignment and video rendering were done using PyMol ¹.

File Name: Supplementary Movie 2.

Description: Protomer sub-domain movement. Alignment of the gp41 domains of B41 SOSIP.664 Env trimer at 3.5Å (red) and 3.8Å (grey) on their C α coordinates show gp120 and gp41 domain movements. The gp120 sub-domain moves in an anticlockwise direction. Alignment and video rendering were done using PyMol ¹.

File Name: Supplementary Movie 3.

Description: CD4-induced opening of trimer. Morph between the C α coordinates of the open CD4/17b-bound and the closed PGT124/35O22-bound pre-fusion B41 SOSIP.664 Env trimer highlights the large movement of both the gp120 and the gp41 sub-domains. Morphing and video rendering were done using PyMol ¹.

References:

1. Schrodinger L. The PyMOL Molecular Graphics System, Version 1.8. (2015).