

## Supplementary Methods

### Primer Sequences for Thymidine Kinase (UL23) and DNA Polymerase (UL30) Amplification

#### Thymidine Kinase

##### HSV-1

F AACACCCGTGCGTTTTATTC  
R ATATTAAGGTGACGCGTGTGG

##### HSV-2

F ACACACCACACGACAACAATG  
R CGAGGTCCACTTCGCATATT

#### DNA Polymerase

##### HSV-1

###### Set 1

F TTAACTGTACGGCGGACAAC  
R GTGAGCCTTGACGAAGAACAG

###### Set 2

F ATTAACATCACCCGCACCAT  
R TCTTACCCCGTAGATGACG

###### Set 3

F CACGGACTCCATATTTGTGCT  
R TCTATGCAACATTCGACGAGTT

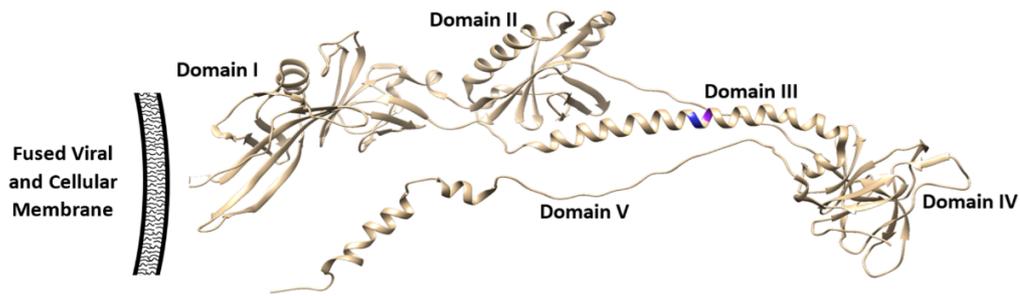
##### HSV-2

###### Set 1

F GCACGCGGCAGTACTTTTAC  
R AAGTTATCGCACAGGTAGGC

###### Set 2

F GCGAGTATTGTGTGCAGGACT  
R ATAAACGCGCAGTTGTTTTTG



**Supplementary Figure S1.** Postfusion protein conformation of glycoprotein B of HSV-1. Residue 527 (V) is shown in blue and residue 529 (I) is shown in purple. The protein is divided in five structural domains. Residues 527 and 529 are within Domain III of glycoprotein B, which is thought to be important in the binding of three glycoprotein peptides together to form the active trimer. The location of the fused viral and cellular membrane relative to the different domains of the postfusion protein is indicated.

List of Genes in HSV with Known HSV-1 x HSV-2 Recombination Events	
Gene	Protein Product
UL15	DNA packaging terminase subunit 1
UL17	DNA packaging tegument protein
UL27	Glycoprotein B
UL28	DNA packaging terminase subunit 2
UL29	Single-stranded DNA-binding protein
UL30	DNA polymerase
UL31	Nuclear egress lamina protein
UL32	DNA packaging protein
UL39	Ribonucleotide reductase large subunit
UL47	Tegument protein VP13/14
UL48	Transactivating tegument protein VP16
UL49	Tegument protein VP22
UL49A	Glycoprotein N
UL50	Deoxyuridine triphosphatase

**Supplementary Table S1:** HSV genes with known HSV-1 x HSV-2 recombination events.