

Clade

c18 unassigned
c17
c16
c15
c14
c13
c12
c11
c9
c10
c8
c6
c7
c3
c5
c2
c1

A138S (0.07)
H156Q (0.04)
H156R (0.03)
T160K (0.13)
G186V (0.2)
L194P (0.25)
T203I (0.04)
S219Y (0.04)
S219F (0.05)
D225G (0.07)
N246H (0.03)

HA1 mutation
(overall frequency in egg-passaged viruses)



3.0

1.5

0.0

-1.5

-3.0

log2 enrichment