

A138S H156Q H156R T160K G186V L194P T203I S219Y S219F D225G N246H (0.07) (0.04) (0.03) (0.13) (0.2) (0.25) (0.04) (0.04) (0.05) (0.07) (0.03) HA1 mutation (overall frequency in egg-passaged viruses)