

Enhancing viral transmission

The Gly⁶¹⁴ (G614) mutation in spike (S) increases ordering of the 630 loop compared with wild-type Asp⁶¹⁴ (D614). This prevents the premature S1 shedding often seen with wild-type S proteins, ensuring that more S protein remains in a fusion-ready “one-up” state, with one receptor binding domain (RBD) exposed within the trimer, ready to bind angiotensin-converting enzyme 2 (ACE2) on host cells, increasing infection efficiency.

