



RBD substitutions relative to ancestral:

- None, other than S477N
- N501Y
- E484K
- E484K+N501Y
- L452R/Q
- L452R+E484Q

Omicron variants:

- BA.1, BA.1.1
- BA.2, BA.2.12.1, BA.3
- BA.4/BA.5