

# Variants and mutations

Variants evolve independently but yet contain similar mutations. Here are some key mutations in several notable variants:

<b>Variants and places where they were initially identified</b>	<b>Total number of mutations</b>	<b>Key mutations of the spike protein</b>
B117 (United Kingdom)	18	N501Y
B1351 (South Africa)	8	N501Y E484K K417N
P1 (Brazil)	21	N501Y E484K
B1427-9 (California)	5	L452R
B1617 (India)	13	E484K L452R