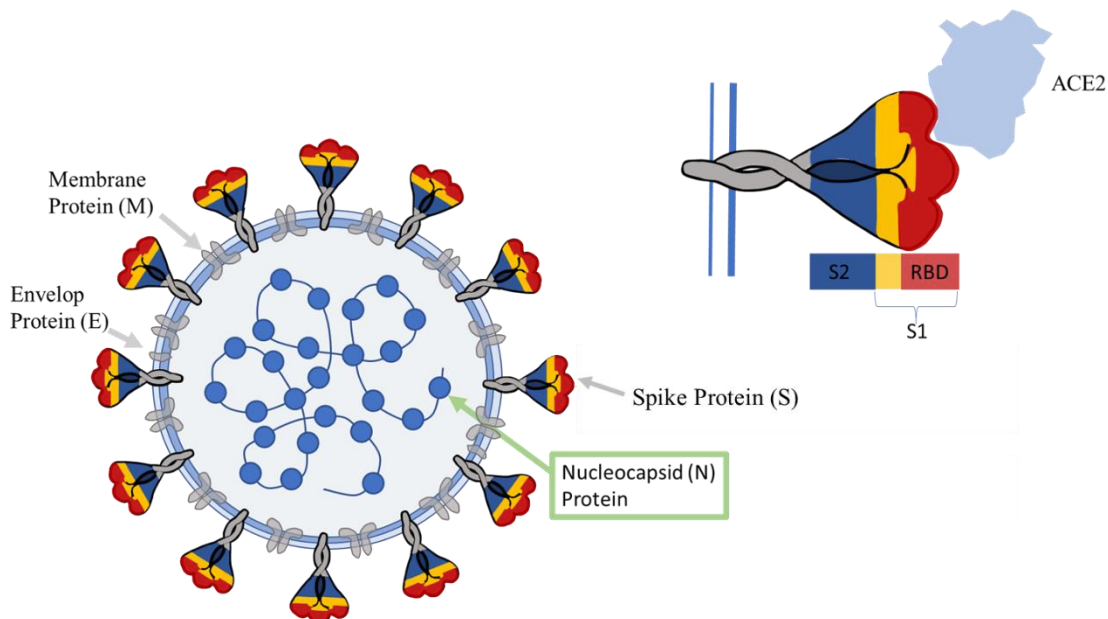


## Impact of the EG.5 and BA.2.86 variants of SARS-CoV-2 on BTNX's Rapid Response® COVID-19 Antigen Rapid Test Cassette – At Home (COV-19C25B, COV-19CSHC)

The emerging variants of SARS-CoV-2, EG.5 and BA.2.86, have caused great concern recently. These new variants carry over 40 genetic changes due to mutations, primarily affecting the Spike (S) protein of SARS-CoV-2.

As Illustrated in Figure A, SARS-CoV-2 has several structural proteins including Spike (S), Envelope (E), Membrane (M) and Nucleocapsid (N) proteins. BTNX's Rapid Response® COVID-19 Antigen Rapid Test Cassette – At Home is designed to detect the SARS-CoV-2 viral **nucleocapsid protein**.



**Figure A** Structure of SARS-COV-2 *\*Illustrative purpose only*

Mutations of the nucleocapsid protein of the EG.5 variant include P13L,  $\Delta$ 31-33, R203K, G204R and S413R. Mutations of the nucleocapsid protein of the BA.2.86 variant include P13L,  $\Delta$ 31-33, R203K, G204R, Q229K, G243S, E378Q and S413R. These mutations are not located in the target epitopes of the Rapid Response® COVID-19 Antigen Test Device, so no effect on the performance is to be expected.

Analytical study using EG.5 recombinant protein further confirmed that that the test accurately detects the strain at a similar level of detection limit. Analytical study of BA.2.86 is in progress. The results will be made available as soon as the investigations have concluded.

BTNX continues to follow the latest findings on COVID-19 and remains committed to maintaining the highest level of excellency in our products.