

DESCRIPTION

<i>Description</i>	Recombinant Human Coronavirus SARS-CoV-2 Spike Protein S1 subunit, Receptor-Binding Domain (RBD), variant Delta, Lineage B.1.617.2 (20A/S:478K, India)
<i>Sequence</i>	Native NCBI Accession Number: MN908947 Arg319-Phe541, with mutation L452R; T478K
<i>Expression system</i>	HEK293 cells
<i>Tag</i>	HIS Tag C-Terminus
<i>Purification</i>	Affinity chromatography
<i>Extinction coefficient</i>	33850 M ⁻¹ .cm ⁻¹ Abs 0.1% (=1 g/l) 1.29 assuming all pairs of Cys residues form cystines
<i>Predicted Molecular Weight</i>	26.1 kDa

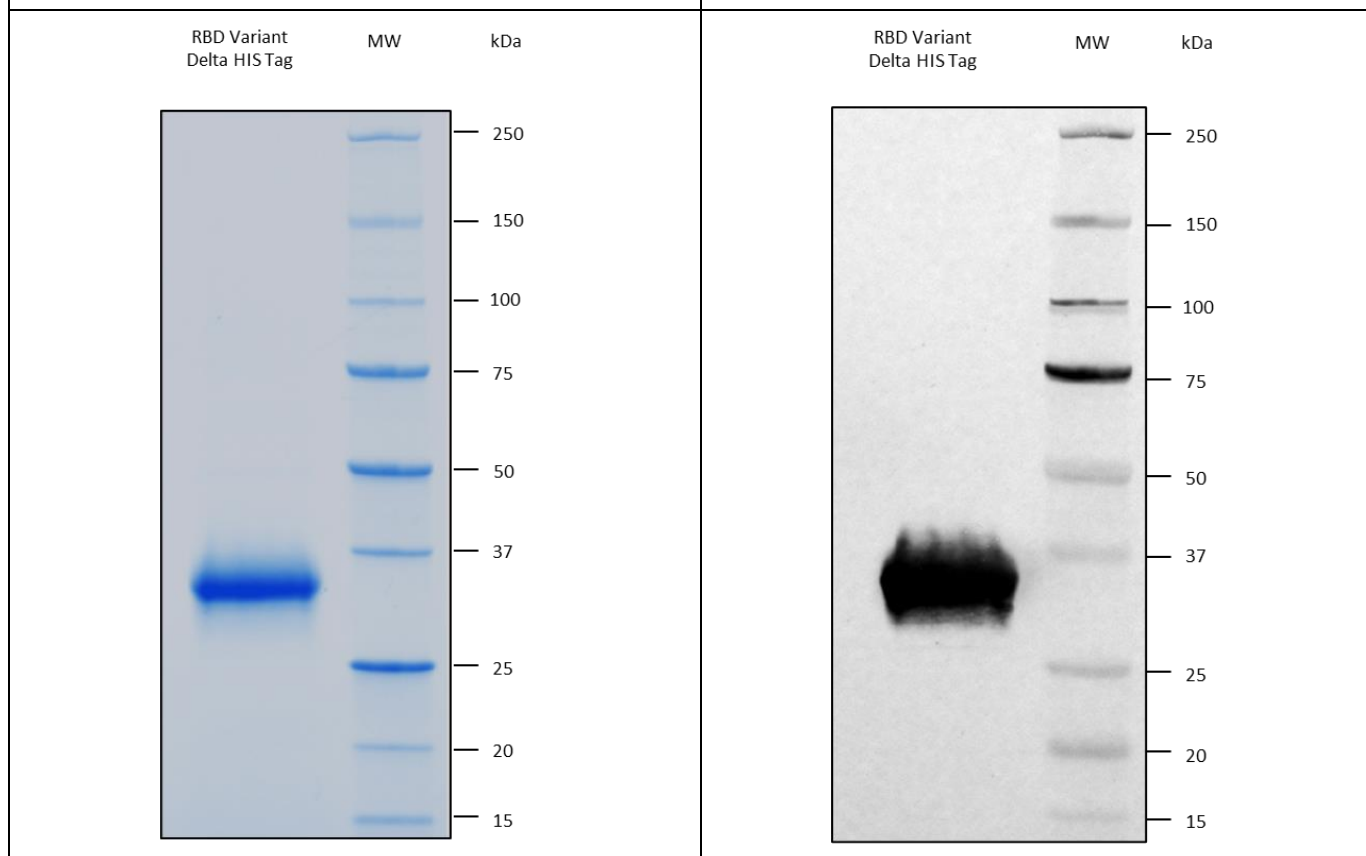
SPECIFICATIONS

<i>SDS Page</i>	Approx. 32 kDa
<i>Concentration</i>	1 mg/ml
<i>Purity</i>	>95% by SDS PAGE gel
<i>Formulation</i>	Liquid PBS
<i>Activity</i>	Recognized by CR3022 anti RBD recombinant antibody
<i>Stability and Storage</i>	Store at minimum -20°C. Avoid repeated freeze-thaw cycles

DATA

SDS-PAGE 4-15% under reducing conditions and visualized by Coomassie blue staining showing a band at approx. 32 kDa

Western Blot: RBD Variant Delta HIS Tag detected with anti-HIS-Tag antibody HRP conjugate showing a band at approx. 32 kDa



SARS-CoV-2 Spike Glycoprotein (S1) RBD variant Delta Lineage B.1.617.2

Spike protein (S protein) is one of the four structural proteins of Coronavirus (SARS-Cov, SARS-Cov-2, MERS amongst others), S protein plays the most important role in viral attachment, fusion and entry, and it serves as a target for development of antibodies, entry inhibitors and vaccines.

In the S protein, the Receptor Binding Domain (RBD) mediates viral entry of SARS-Cov and SARS-Cov-2 into host cells by its interaction with the membrane receptor ACE2 (Angiotensin-converting enzyme 2).

The variant lineage B.1617.2 of SARS-Cov-2 was first identified in India in late 2020. The WHO named it “the Delta variant” at the end of May 2021. The two mutations in the RBD (L452R and T478K) affect the transmissibility of the SARS-CoV-2 virus. Since the 7th May 2021, the classification of this variant moves from variant under investigation (VUI) to variant of concern (VOC). This variant seems to be responsible in part for the second wave of the pandemic starting in February 2021 in India.

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Rec SARS-CoV-2 RBD variant Delta Lineage B.1.617.2 715-H25-0BU

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