

SARS-COV-2 Spike RBD (N501Y, K417N, E484K) Protein

Cat. No. COV-VM1RM

Description

Source	Recombinant SARS-COV-2 Spike RBD (N501Y,K417N,E484K) Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Arg319-Phe541(N501Y,K417N,E484K).
Accession	QHD43416.1
Molecular Weight	The protein has a predicted MW of 26.2 kDa. Due to glycosylation, the protein migrates to 30-40 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

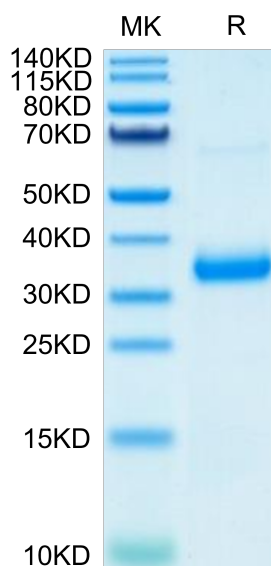
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The spike protein (S) of coronavirus (CoV) attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S mediates this interaction.The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

Assay Data

Bis-Tris PAGE



SARS-COV-2 Spike RBD (N501Y,K417N,E484K) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

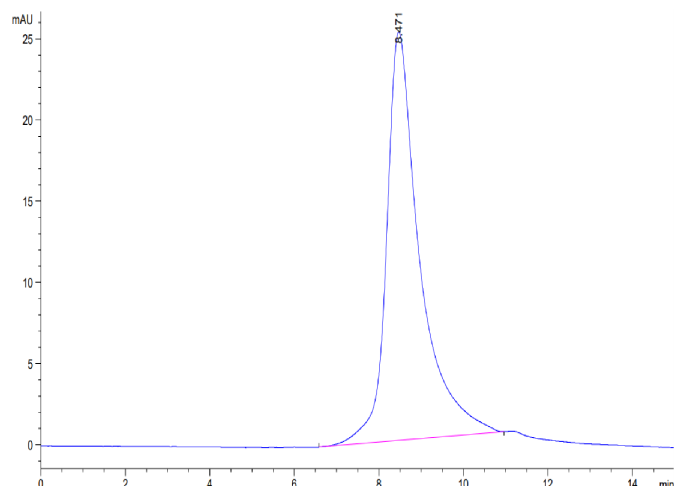
SEC-HPLC

SARS-COV-2 Spike RBD (N501Y, K417N, E484K) Protein

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KACATUS

Assay Data

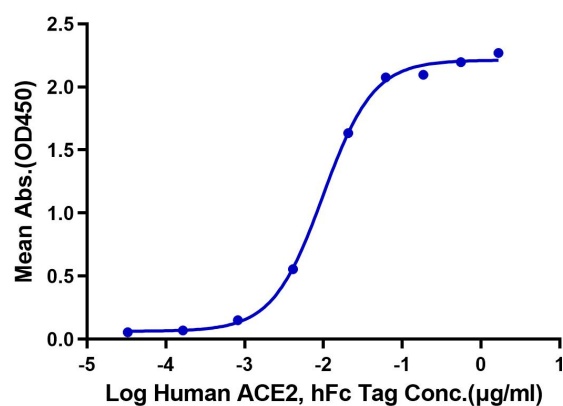


The purity of SARS-COV-2 Spike RBD (N501Y,K417N,E484K) is greater than 95% as determined by SEC-HPLC.

ELISA Data

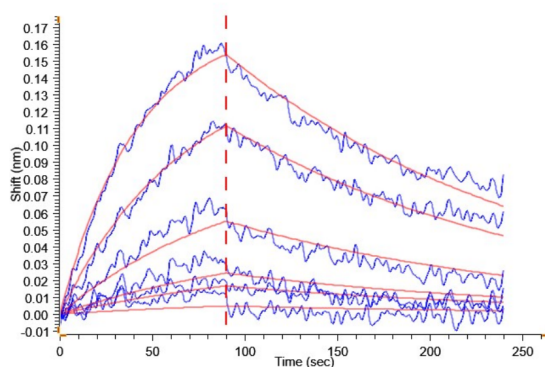
SARS-CoV-2 Spike RBD(N501Y,K417N,E484K), His Tag ELISA

0.05µg SARS-CoV-2 Spike RBD(N501Y,K417N,E484K), His Tag Per Well



Immobilized SARS-COV-2 Spike RBD (N501Y,K417N,E484K) , His Tag at 0.5µg/ml (100ul/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 9.9ng/ml determined by ELISA.

BLI Data



Loaded Human ACE2, hFc Tag on ProA-Biosensor can bind SARS-COV-2 Spike RBD (N501Y, K417N, E484K), His Tag with an affinity constant of 12.90 nM as determined in BLI assay (Gator® Prime).