

Recombinant SARS-COV-2 S protein RBD (N501Y) Protein (His Tag)

Cat. No. bs-46011P

Description

Protein Sequence	SARS-COV-2 S protein RBD (N501Y) is expressed with a His tag at the C-terminal (Arg319-Phe541).
Source	Mammalian Expression System
Accession	QHD43416.1
Mol wt	The protein has a predicted MW of 26.2 kDa. Due to glycosylation, the protein migrates to 36-40kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per ug by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC
Activity assay	Not tested.

Formulation and Storage

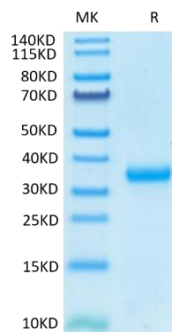
Formulation	Lyophilized powder (Lyophilized from 0.22um filtered solution in 20mM PB (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.)
Storage	The product should be stored at -70°C or -20°C.

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.

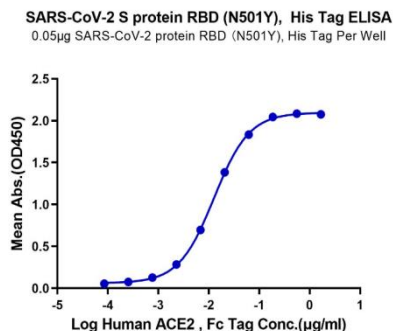
Assay Data

Tris-Bis PAGE



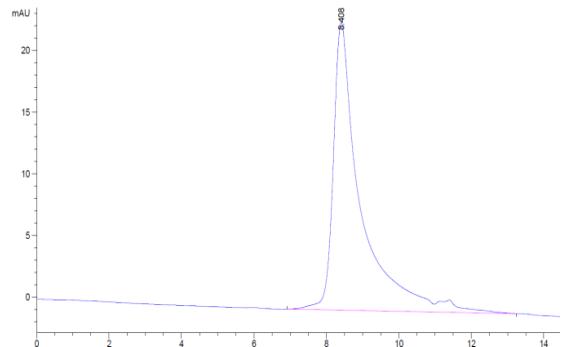
SARS-COV-2 S protein RBD (N501Y) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

ELISA Data



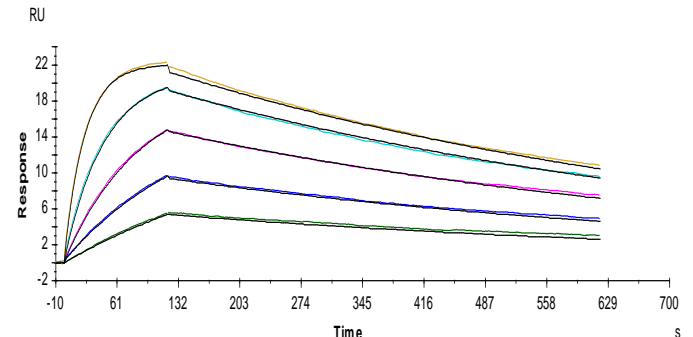
Immobilized SARS-CoV S protein RBD (N501Y), His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human ACE2, Fc Tag with the EC50 of 12.7ng/ml determined by ELISA.

HPLC Data



The purity of SARS-COV-2 S protein RBD (N501Y) is greater than 95% as determined by SEC-HPLC

SPR Data



Human ACE2 captured on protein A chip, can bind SARS-CoV S protein RBD (N501Y), His Tag with an affinity constant of 1.74nM as determined in SPR assay (Biacore T200).