

Recombinant SARS-COV-2 Spike S1 (N501Y) Protein (His Tag)

Cat. No. bs-46012P

Description

Protein Sequence	SARS-COV-2 Spike S1 (N501Y) Protein is expressed with a His-tag at the C-terminal (Val16-Arg685).
Source	Mammalian Expression System
Accession	YP_009724390.1
Mol wt	The protein has a predicted MW of 76 kDa. Due to glycosylation, the protein migrates to 115-140KDa based on the 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

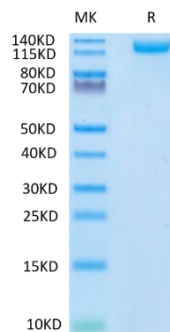
Formulation	Lyophilized powder (Lyophilized from 0.22um filtered solution in 20mM PB (pH 7.4). 5% trehalose is added as protectant before lyophilization.)
Storage	The product should be stored at -70°C or -20°C.

Background

A new variant of SARS-CoV-2 is spreading in the UK and is rapidly becoming a global threat. It is characterized by multiple mutations in the spike protein. Among them, N501Y is of major concern because it involves one of the six key amino acid residues determining a tight interaction of the SARS-CoV-2 receptor-binding domain (RBD) with its cellular receptor angiotensin-converting enzyme 2 (ACE2).

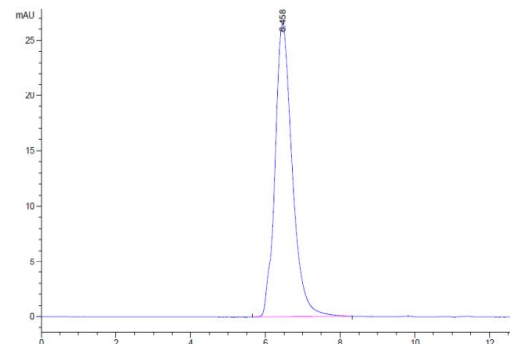
Assay Data

Tris-Bis PAGE



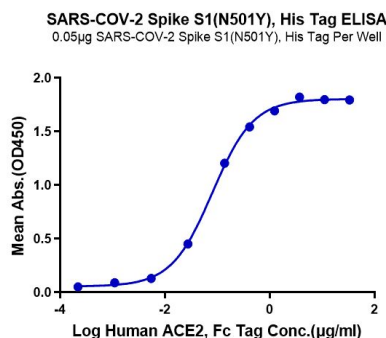
SARS-COV-2 Spike S1 (N501Y) Protein on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

HPLC Data



The purity of SARS-COV-2 Spike S1 (N501Y) Protein is greater than 95% as determined by SEC-HPLC.

ELISA Data



Immobilized SARS-COV-2 Spike S1 (N501Y) Protein, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose-response curve for Human ACE2, Fc Tag with the EC50 of 80.3ng/ml determined by ELISA.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.