

Recombinant SARS-CoV-2 Spike RBD Protein with His-Tag

(Catalog # E80000)

Description

Recombinant SARS-CoV-2 Spike RBD-His Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Arg319-Phe541) of 2019-ncov Spike RBD-His (Accession #YP_009724390.1) fused with a 6xHis tag at the C-terminus.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Recombinant SARS-COV-2 Spike RBD-His at 2ug/mL (100 uL/well) can bind Recombinant Human ACE2 with a linear range of 0.15-4.53 ng/mL. Immobilized human ACE2 on COOH Chip, can bind SARS-COV-2 Spike RBD Protein with an affinity constant of 36.7 nM as determined in an SPR assay (Nicoya OpenSPR).

Purity

>95% by SDS-PAGE;> 95% by HPLC

Endotoxin

< 0.1 EU/ug of the protein by LAL method.

Formulation

Lyophilized from a 0.22 um filtered solution of PBS, pH 7.4. or Supplied as a 0.22 um filtered solution in PBS, pH 7.4.

Species

SARS-CoV-2

Calculated MW

25.9kDa

Expressed Host

HEK293 cells

Tag 6xHis tag at the C-terminus

Gene ID

43740568

Storage

Store the lyophilized protein at -20°C to -80°C for long-term. After reconstitution, the protein solution is stable at - 20°C for 3 months, at 2-8°C for up to 1 week. or This product is stable at \leq -70°C for up to 6 months from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at the recommended temperature.

Reconstitution

For lyophilized protein: Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.

Alternative Names

S1-RBD protein; NCP-CoV RBD Protein; novel coronavirus RBD Protein; 2019-nCoV RBD Protein; S glycoprotein Subunit1 RBD Protein, SARS-CoV-2, 2019-nCoV



Recombinant SARS-CoV-2 Spike RBD Protein with His-Tag was determined by SDS-PAGE with Coomassie Blue, showing a band at 36 kDa.



Immobilized Recombinant SARS-CoV-2 Spike RBD Protein with His-Tag at $2\mu g/mL$ (100 $\mu L/well$) can bind Recombinant Human ACE2 with a linear range of 1.5-9.4 ng/mL.



The purity of Recombinant SARS-CoV-2 Spike RBD Protein with His-Tag was greater than 95% as determined by SEC-HPLC.



Immobilized human ACE2 on COOH Chip, can bind Recombinant SARS-CoV-2 Spike RBD Protein with His-Tag with an affinity constant of 36.7 nM as determined in a SPR assay (Nicoya OpenSPR).