

Understanding Life One Protein at a Time ...

Catalog No:	LT-V016
Product Name:	Recombinant SARS-CoV-2 Spike NTD Protein
Description:	Recombinant protein of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) Spike N-Terminal Domain (NTD, V16-S305), with a polyhistidine tag at its C-terminus.
Alias or Clone:	2019-nCoV, COVID-19
Source:	Expressed and purified from in vitro cell culture of Human 293 cells
Accession No.:	NC_045512.2; YP_009724390.1; Gene ID: 43740568;
Amino acid Sequence:	The amino acid sequences of recombinant protein was derived from the V16- S305 region of accession# YP_009724390.1
Purity:	>90% by SDS-PAGE gel and Coomassie Blue staining
SDS-PAGE & Biological Activity:	Predicted MW of this product is ~39.6 kDa, however it runs higher than 40 kDa on the reduce SDS-PAGE due to a post-translational modification when expressing in mammalian cells
Formulation:	Protein formulated in a solution of PBS, pH7.2;
Endotoxin:	Endotoxin level is $< 0.1 \text{ ng/}\mu\text{g}$ of protein ($<1 \text{ EU/}\mu\text{g}$)
Shipping, Storage and Stability:	The product is shipped with dry ice. Upon receipt, unopened vial can be stored at -80°C for over 12 months. Avoid repeated freeze/thaw cycles. Also the product can be aliquoted in the smaller size of working aliquots with the desired buffer and concentration, and stored at or below -20°C stable for 3 to 4 weeks.
Background:	The coronavirus Spike protein (S) is a large oligomeric transmembrane protein that mediates coronavirus entry into host cells. It contains S1 and S2 two subunits. Spike S1 mainly contains an N-terminal domain (NTD) and a receptor binding domain (RBD) that recognizes a variety of host cell surface receptors. S2 contains basic elements responsible for the membrane fusion. The coronavirus first binds to a receptor on the host cell surface through Spike S1 subunit, and then fuses viral and host membranes through Spike S2 subunit.

