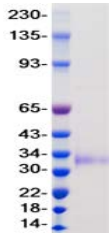
PRODUCT DATASHEET

Catalog No:	**LTP-V009**
Product Name:	Recombinant SARS-CoV-2 Spike S1 RBD Protein
Description:	Recombinant protein of the receptor binding domain (RBD) of SARS-CoV-2 (2019-nCoV) Spike S1 from Wuhan pneumonia virus (MN908947.3), 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 accession# YP_009724390.1
Purity:	>95% by SDS-PAGE gel and Coomassie Blue staining
SDS-PAGE & Biological Activity:	*Predicted MW of this product is ~ 29.5 kDa. However it runs higher in SDS-PAGE under the reduced condition due to the post-translational modification in the recombinant expression.* 
Formulation:	Protein formulated in a solution of phosphate buffered saline, pH7.2;
Endotoxin:	Endotoxin level is < 0.1 ng/μg of protein (<1 EU/μg)
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 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.

FOR RESEARCH LABORATORY TEST USE ONLY!