Recombinant COVID-19 NSP1 protein, His-tagged

Cat. No. NSP1-002V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant COVID-19 NSP1 protein (Met1-Gly180) was fused to his-tag at the C-terminus and expressed in E.coli.
Species	Sars-CoV-2
Source	E.coli
ProteinLength	Met1-Gly180
Description	The viral nonstructural protein 1 (nsP1) is the only membrane-associated protein that anchors the replication complex to the cellular membranes. NSP1 inhibits host translation by interacting with the 40S ribosomal subunit. The nsp1-40S ribosome complex further induces an endonucleolytic cleavage near the 5'UTR of host mRNAs, targeting them for degradation. Viral mRNAs are not susceptible to nsp1-mediated endonucleolytic RNA cleavage thanks to the presence of a 5'-end leader sequence and are therefore protected from degradation. By suppressing host gene expression, nsp1 facilitates efficient viral gene expression in infected cells and evasion from host immune response.
Predicted N Terminal	Met
Form	Lyophilized from 0.22 μm filtered solution in PBS, Arginine, pH7.4, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 21.7 kDa. The protein migrates as 22-25 kDa under reducing (R) condition (SDS-PAGE).

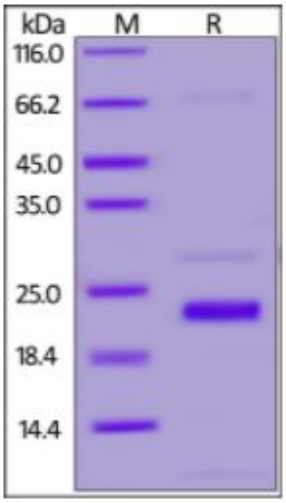
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Endotoxin	Less than 1.0 EU per μg by the LAL method.
Purity	>90% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.
Shipping	Powder,RT

GENE INFORMATION

Gene Name	orf1ab
Official Symbol	orf1ab
Synonyms	pp1ab
Gene ID	1489680
Protein Refseq	NP_828860.2
UniProt ID	P0C6X7

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SDS-PAGE of NSP1-002V	 COVID-19 NSP1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

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