

Recombinant SARS-CoV-2 NSP1 Protein (His Tag)

Catalog Number: PKSR030467

Note: Centrifuge before opening to ensure complete recovery of vial contents.

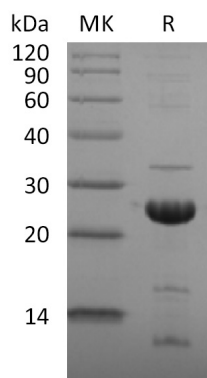
Description

| | |
|---------------------|--|
| Species | SARS-CoV-2 |
| Source | E.coli-derived SARS-CoV-2 NSP1 protein Met1-Gly180, with an C-terminal His |
| Mol_Mass | 22.7 kDa |
| Accession | YP_009725297.1 |
| Bio-activity | Not validated for activity |

Properties

| | |
|-----------------------|---|
| Purity | > 85 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles. |
| Shipping | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C. |
| Formulation | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 10% Glycerol, pH 8.5. |
| Reconstitution | Not Applicable |

Data



Background

The Severe Acute Respiratory Syndrome (SARS) Coronavirus (CoV) is an enveloped, positive-stranded RNA viruses that can cause a severe respiratory disease. Its genome consists of a ~30 kb linear, non-segmented, capped, polycistronic, polyadenylated RNA molecule, the first two-third of which is directly translated into two large polyproteins. These two polypeptides are processed into 16 non-structural proteins (nsps), forming the replicase complex, which is active in the cytoplasm in close association with cellular membranes. Nsp1 was proved to be able to suppress host gene expression by promoting host mRNA degradation and was involved in cellular chemokine deregulation. This virus evades the host innate immune response in part through the expression of its non-structural protein (nsp) 1, which inhibits both host gene expression and virus- and interferon (IFN)-dependent signaling. Thus, nsp1 is a promising target for drugs, as inhibition of nsp1 would make SARS-CoV more susceptible to the host antiviral defenses.

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