

#### Synonym

NSP7,nsp7,Non-structural protein 7

#### **Source**

SARS-CoV-2 NSP7, His Tag(NS7-C51H6) is expressed from E.coli cells. It contains AA Ser 1 - Gln 83 (Accession # <u>YP 009725303.1</u>).

Predicted N-terminus: Met

#### **Molecular Characterization**

NSP7(Ser 1 - Gln 83) YP\_009725303.1

Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 11.3 kDa. The protein migrates as 12 kDa under reducing (R) condition (SDS-PAGE).

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### Formulation

Supplied as  $0.2 \mu m$  filtered solution in PBS, pH7.4 with glycerol as protectant.

Contact us for customized product form or formulation.

### **Shipping**

This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.

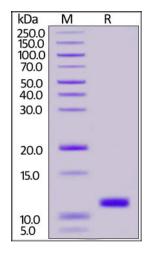
#### **Storage**

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

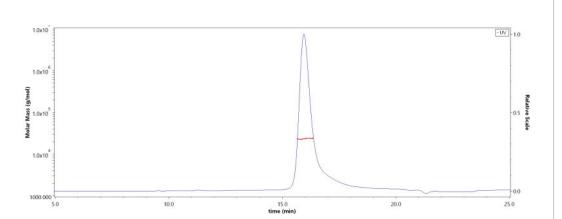
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

### **SDS-PAGE**



SARS-CoV-2 NSP7, 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 95%.

# SEC-MALS



The purity of SARS-CoV-2 NSP7, His Tag (Cat. No. NS7-C51H6) is more than 90% and the molecular weight of this protein is around 20-25 kDa verified by SEC-MALS.

Report

### Background

During the formation of the coronaviral replication/transcription complex, essential steps include processing of the conserved polyprotein nsp7-10 region by the main protease Mpro and subsequent complex formation of the released nsps. Upon infecting host cells, coronaviruses assemble a multi-subunit RNA-synthesis complex of viral non-structural proteins (nsp) responsible for the replication and transcription of the viral genome. non-structural proteins 7 (NSP7) forms a hexadecamer with nsp8 (8 subunits of each) that may participate in viral replication by acting as a primase. Alternatively, may synthesize substantially longer products than oligonucleotide primers.

### **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

