

Synonym

NSP7,nsp7,Non-structural protein 7,COVID-19

Source

SARS-CoV-2 NSP7, His Tag (NS7-C51H6) is expressed from E.coli cells. It contains AA Ser 1 - Gln 83 (Accession # [YP_009725303.1](#)).

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

Delivered as bulk protein in a 0.2 µm filtered solution of PBS, pH7.4 with glycerol as protectant.

Contact us for customized product form or formulation.

Storage

Please avoid repeated freeze-thaw cycles.

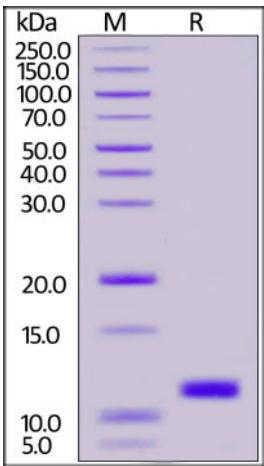
This product is stable after storage at:

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

Shipping

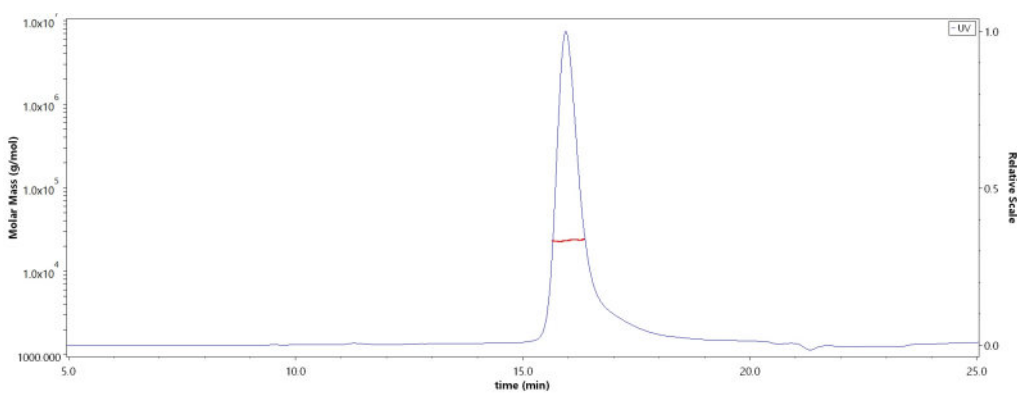
This product is supplied as sterile liquid solution and shipped frozen with dry ice, please inquire the shipping cost.

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) was 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 nsp's. 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

SARS-CoV-2 (COVID-19) NSP7 Protein, His Tag (MALS verified)

Catalog # NS7-C51H6



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.

References

- (1) [Krichel B, et al. Biochem J. 2020. 477\(5\):1009-1019.](#)
- (2) [Kirchdoerfer RN, et al. Nat Commun. 2019. 10\(1\):2342.](#)

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