SARS-CoV-2 (COVID-19) NSP7&NSP8 Protein, His Tag

Catalog # NS8-C5125

Synonym

NSP7 & NSP8,nsp7 & nsp8,COVID-19

Source

SARS-CoV-2 NSP7&NSP8, His Tag (NS8-C5125) is expressed from E.coli cells. It contains AA Ser 1 - Gln 83 (NSP7) & Ala 1 - Gln 198 (NSP8) (Accession # YP_009725303.1(NSP7) & YP_009725304.1(NSP8)).
Predicted N-terminus: Met

Molecular Characterization

This protein carries a polyhistidine tag. The protein has a calculated MW of 32.1 kDa. The protein migrates as 28-32 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.

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

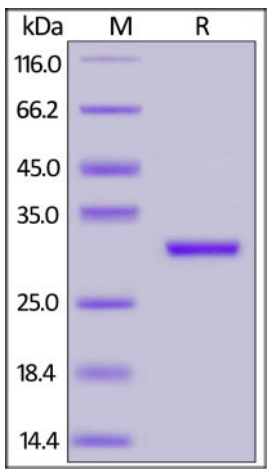
Please avoid repeated freeze-thaw cycles.

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&NSP8, 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%.

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 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.