

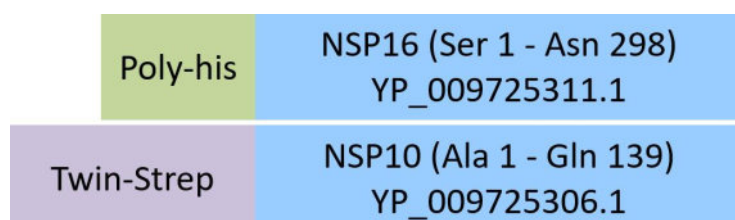
Synonym

NSP16 & NSP10, nsp16 & nsp10

Source

SARS-CoV-2 NSP16&NSP10 Heterodimer Protein, His Tag&Twin Strep Tag(NS0-C51W3) is expressed from E.coli cells. It contains AA Ser 1 - Asn 298 (NSP16) & Ala 1 - Gln 139 (NSP10) (Accession # [YP_009725311.1](#) (NSP16) & [YP_009725306.1](#) (NSP10)).

Predicted N-terminus: Met (NSP16) & Met (NSP10)

Molecular Characterization

SARS-CoV-2 NSP16&NSP10 Heterodimer Protein, His Tag&Twin Strep Tag is produced by co-expression of NSP16 and NSP10, has a calculated MW of 35.3 kDa (NSP16) and 18.3 kDa (NSP10). Subunit NSP16 is fused with a polyhistidine tag at the N-terminus and subunit NSP10 is fused with a Twin Strep tag at the N-terminus. The reducing (R) heterodimer protein migrates as 18-19 kDa and 35 kDa.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in PBS, pH7.4 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

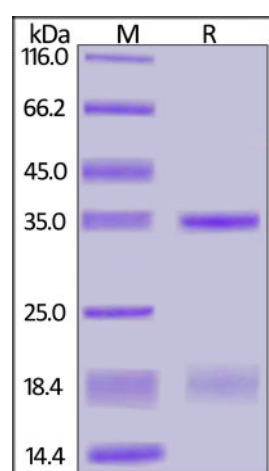
This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.

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 NSP16&NSP10 Heterodimer Protein, His Tag&Twin Strep 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%.

Background

NSP10, Plays a pivotal role in viral transcription by stimulating both nsp14 3-5 exoribonuclease and 2-O-methyltransferase (NSP16) activities. Therefore plays an essential role in viral mRNAs cap methylation. 2-O-methyltransferase (NSP16) that mediates mRNA cap 2-O-ribose methylation to the 5-cap structure of viral mRNAs. N7-methyl guanosine cap is a prerequisite for binding of nsp16. Therefore plays an essential role in viral mRNAs cap methylation which is essential to evade immune system. Nsp10 forms a dodecamer and interacts with nsp14 and nsp16; these interactions enhance nsp14 and nsp16 enzymatic activities.

Clinical and Translational Updates

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