SARS-CoV-2 (COVID-19) NSP16&NSP10 Heterodimer Protein, His Tag&Twin Strep Tag

Catalog # NS0-C51W3

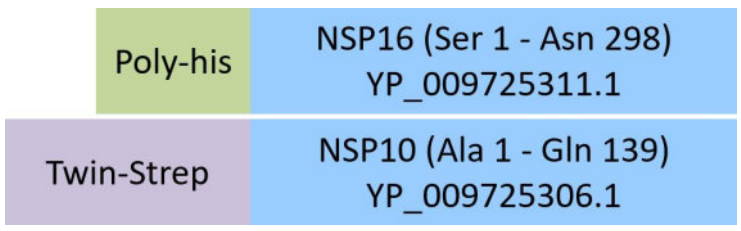
Synonym

NSP16 & NSP10,nsp16 & nsp10,COVID-19

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

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.

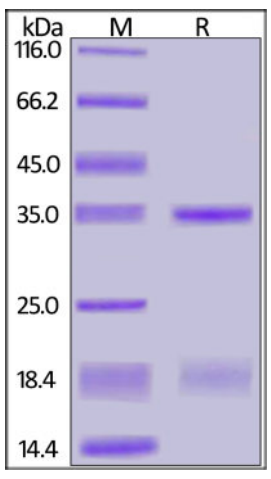
This product is stable after storage at:

- 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 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.

References

(1) Wang Y, et al. J Virol. 2015. 89(16):8416-27.

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