SARS-CoV-2 (2019-nCoV) NSP10-His Recombinant Protein

Catalog Number: 40599-V07E

General Information

Gene Name Synonym:

NSP10-CoV

Protein Construction:

A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) NSP10 (YP_009725306.1) (Ala1-Gln139) was expressed with an initial Met at the N-terminus and a polyhistidine tag at the C-terminus.

Source: 2019-nCoV

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:

Please contact us for more information.

Predicted N terminal: Met

Molecular Mass:

The recombinant SARS-CoV-2 (2019-nCoV) NSP10 Protein (His tag) consists of 146 amino acids and predicts a molecular mass of 15.7 kDa.

Formulation:

Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

Protein Description

NSP10 is a major regulator of coronavirus replicase function. NSP10 contains two zinc fingers and binds and stimulates both NSP14 and NSP16 activities. Researchers has found that the nsp10 surface that interacts with nsp14 and nsp16 and possibly other subunits of the viral replication complex may be a target for the development of antiviral compounds against pathogenic coronaviruses.

References

1.Mickaël Bouvet,et al.Coronavirus Nsp10, a Critical Co-factor for Activation of Multiple Replicative Enzymes.THE JOURNAL OF BIOLOGICAL CHEMISTRY.2014
2.Yuanyuan Ma,et al.Structural basis and functional analysis of the SARS coronavirus nsp14-nsp10 complex. Proc Natl Acad Sci USA. 2015
3.Etienne Decroly,et al.Crystal structure and functional analysis of the SARS-coronavirus RNA cap 2'-O-methyltransferase nsp10/nsp16 complex. PLoS Pathog.2011