# Data Sheet (Cat.No.TMPY-06012)

TargetMol

## SARS-CoV-2 NSP10 Protein

### General Information

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|---|---|
| Protein Construction: | A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) NSP10 (YP_009725306.1) (Ala1-Gln139) was expressed with two amino acids (GP) at the N-terminus. Predicted N terminal: Gly |
| Species: | SARS-CoV-2 |
| Expression Host: | E. coli |
| Accession: | YP_009725306.1 |
| Molecular Weight: | 15 kDa (predicted) |

### QC Testing

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| Biological Activity: | Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first. |
| Purity: | > 95 % as determined by SDS-PAGE. |
| Endotoxin: | Please contact us for more information. |
| Formulation: | Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization. |

### Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

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.

Reference

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



Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481