

# SARS-CoV-2 (COVID-19) NSP5A Protein, His Tag

Catalog Number:RCOV01

**Web:** www.boster.com.cn **Phone:** +86 27 67845390 **Fax:** +86 27 67845390 **Email:** boster@boster.com.cn

## Basic Information

<b>Product Name</b>	<b>SARS-CoV-2 (COVID-19) NSP5A Protein, His Tag</b>
<b>Catalog Number</b>	RCOV01
<b>Size</b>	100µg/vial
<b>Form</b>	Lyophilized
<b>Method of Expression</b>	<i>E. Coli.</i>
<b>Method of Purification</b>	Nickel column affinity purification
<b>Theoretical Molecular Weight</b>	34.6KD
<b>Formulation</b>	Lyophilized from sterile 20mM PB, 150mM NaCl, PH 7.3-7.4, 10% glycerol and 4% trehalose.
<b>Endotoxin</b>	Less than 1 EU/µg protein as determined by LAL method.
<b>0.2µm Filtration</b>	Yes
<b>Purity Measurement Method</b>	> 90 %, by SDS-PAGE quantitative densitometry by Coomassie® Blue Staining.
<b>Expression form</b>	In supernatant

## Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

## Storage

At -20 °C for 6 months from date of receipt. Store it under sterile conditions at -20 °C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

## Sequence

amino acid sequence( 6xHis tag at C-terminal) :

ACCESSION: YP\_009725301

SGFRKMAFPSGKVEGCMVQVTCGTTTTLNLWLDDVVYCPRHVICTSEDMLNPNYEDLLI  
RKSNNHNLVQAGNVQLRVIGHSMQNCVLKLVDTANPKTPKYKFVRIQPGQTFSVLACYN  
GSPSGVYQCAMRPNFTIKGSFLNGSCGSVGFNIDYDCVSFCYMHMELPTGVHAGTDLE  
GNFYGPFVDRQTAQAAGTDTTITVNVLAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYN

YEPLTQDHVDILGPLSAQTGIAVLDMCASLKELLQNGMNGRTILGSALLEDEFTPFDVVRQ  
CSGVTFQ

## Background

---

Coronaviruses (CoV) are a family of large and enveloped positive-sense single-stranded RNA viruses that are classified into four genera, the alpha, beta, gamma, and delta coronaviruses. While gamma and delta coronaviruses mainly infect birds, alpha and beta coronaviruses are known to infect mammals and cause human respiratory illnesses such as the common cold, pneumonia, and severe diseases like SARS, MERS, and COVID-19. Coronavirus nucleoproteins localize to the cytoplasm and the nucleolus, a subnuclear structure, in both virus-infected primary cells and in cells transfected with plasmids that express N protein. Coronavirus N protein is required for coronavirus RNA synthesis, and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is a most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to formation of the helical nucleocapsid. Nucleocapsid protein is a highly immunogenic phosphoprotein also implicated in viral genome replication and in modulating cell signaling pathways. Because of the conservation of N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

## Purity by SDS-PAGE

---

