

PRODUCT INFORMATION

SARS-CoV-2 nsp7 (recombinant)

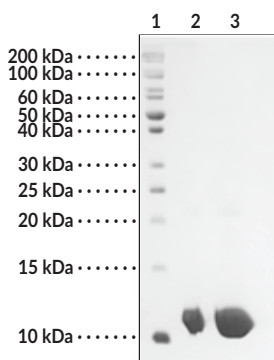
Item No. 40881

Overview and Properties

Synonyms:	SARS-CoV-2 Non-structural Protein 7, Severe Acute Respiratory Syndrome Coronavirus 2 nsp7
Source:	Recombinant SARS-CoV-2 C-terminal His-tagged nsp7 expressed in <i>E. coli</i>
Amino Acids:	3,831-3,913
Uniprot No.:	P0DTD1
Storage:	-80°C (as supplied); avoid repeated freeze/thaw cycles
Stability:	≥1 year
Purity:	≥90%
Supplied in:	50 mM Tris-HCl, pH 7.5, with 200 mM sodium chloride and 20% glycerol
Endotoxin Testing:	< 1.0 EU/μg, determined by the LAL endotoxin assay
Protein	
Concentration:	<i>batch specific</i> mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers

Lane 2: SARS-CoV-2 nsp7 (2 μg)

Lane 3: SARS-CoV-2 nsp7 (10 μg)

SDS-PAGE Analysis of SARS-CoV-2 nsp7

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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Description

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped positive-stranded RNA virus and the causative agent of COVID-19, a primarily respiratory illness characterized by fever, cough, and shortness of breath that can lead to life-threatening complications.¹⁻⁵ The SARS-CoV-2 genome contains approximately 30 kilobases and 14 open reading frames (ORFs) that encode four structural proteins: spike, envelope, membrane, and nucleocapsid, as well as 16 non-structural proteins and 9 accessory factors.⁶ SARS-CoV-2 non-structural protein 7 (nsp7) is encoded within *ORF1ab* and is a cofactor in the RNA replication transcriptional complex. nsp7 is highly conserved in coronaviruses, and in SARS-CoV-2 it forms a decameric RNA replication transcriptional complex with the RNA polymerase cofactor nsp8 and the RNA-dependent RNA polymerase (RdRp) nsp12.⁷ Mutations in the nsp7-nsp8 binding interface reduce the stability of the RNA replication transcriptional complex, leading to impaired RNA polymerase activity.⁸

References

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