Datasheet for ABIN6952636

SARS-CoV-2 NSP3 Protein (His tag)

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	100 µg
Target:	SARS-CoV-2 NSP3 (NSP3)
Origin:	SARS Coronavirus-2 (SARS-CoV-2)
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SARS-CoV-2 NSP3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	SARS-CoV-2 (COVID-19) Papain-like Protease Protein, His Tag
Sequence:	AA 746-1060
Characteristics:	SARS-CoV-2 Papain-like Protease, His Tag is expressed from E.coli cells. It contains AA Glu 746 - Lys 1060 (Accession # YP_009725299.1). Predicted N-terminus: Met This protein carries a polyhistidine tag at the N-terminus.
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	SARS-CoV-2 NSP3 (NSP3)

Target Details

Abstract:	NSP3 Products
Target Type:	Viral Protein
Background:	New coronavirus is a single-stranded RNA positive-strand envelope type B coronavirus. Similar to the other two coronaviruses that cause SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome), its genome encodes non-structural, structural, and accessory proteins. Non-structural proteins include 3-chymotrypsin-like protease (3CLpro), papain-like protease, helicase, and RNA-dependent RNA polymerase (RNA -dependent RNA polymerase (RdRp). Structural proteins include spike glycoproteins. Papain in coronavirus is the same as 3CLpro. This enzyme operates on no less than 11 cleavage sites on the large polyprotein 1ab. Processing of polyproteins translated from viral RNA is essential. Therefore, press this The activity of this enzyme will prevent virus imitation.
Molecular Weight:	37.6 kDa
NCBI Accession:	YP_009725299

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	50 mM HEPES, 300 mM NaCl, 1 mM TCEP, pH 7.5
Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	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.

Publications

Product cited in:	Ao, Chan, Ouyang, Olukitibi, Mahmoudi, Kobasa, Yao: "Identification and evaluation of the inhibitory effect of Prunella vulgaris extract on SARS-coronavirus 2 virus entry." in: **PLoS ONE**, Vol. 16, Issue 6, pp. e0251649, (2021) (PubMed).

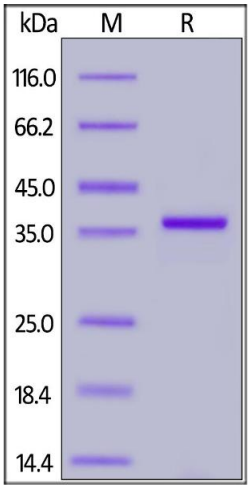
Publications

Olaleye, Kaur, Onyenaka: "Ambroxol Hydrochloride Inhibits the Interaction between Severe Acute Respiratory Syndrome Coronavirus 2 Spike Protein's Receptor Binding Domain and Recombinant Human ACE2." in: **bioRxiv : the preprint server for biology**, (2020) (PubMed).

Olaleye, Kaur, Onyenaka, Adebusuyi: "Discovery of Clioquinol and Analogues as Novel Inhibitors of Severe Acute Respiratory Syndrome Coronavirus 2 Infection, ACE2 and ACE2 - Spike Protein Interaction In Vitro." in: **bioRxiv : the preprint server for biology**, (2020) (PubMed).

Aguilar-Pineda, Albaghdadi, Jiang, Lopez, Del-Carpio, Valdez, Lindsay, Malhotra, Lino Cardenas: " Structural and functional analysis of female sex hormones against SARS-Cov2 cell entry." in: **bioRxiv : the preprint server for biology**, (2020) (PubMed).

Images



SDS-PAGE

Image 1. SARS-CoV-2 Papain-like Protease, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .