

Recombinant SARS-CoV-2 3C-like proteinase Protein

Cat. No. 3C-like proteinase-23S **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant SARS-CoV-2 3C-like proteinase Protein without tag was expressed in E. coli.
Species	SARS-CoV-2
Source	E.coli
Description	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped, positive-sense, single-stranded RNA virus that causes coronavirus disease 2019 (COVID-19). Virus particles include the RNA genetic material and structural proteins needed for invasion of host cells. Once inside the cell the infecting RNA is used to encode structural proteins that make up virus particles, nonstructural proteins that direct virus assembly, transcription, replication and host control and accessory proteins whose function has not been determined.~ ORF1ab, the largest gene, contains overlapping open reading frames that encode polyproteins PP1ab and PP1a. The polyproteins are cleaved to yield 16 nonstructural proteins, NSP1-16. Production of the longer (PP1ab) or shorter protein (PP1a) depends on a -1 ribosomal frameshifting event. The proteins, based on similarity to other coronaviruses, include the papain-like proteinase protein (NSP3), 3C-like proteinase (NSP5), RNA-dependent RNA polymerase (NSP12, RdRp), helicase (NSP13, HEL), endoRNase (NSP15), 2'-O-Ribose-Methyltransferase (NSP16) and other nonstructural proteins. SARS-CoV-2 nonstructural proteins are responsible for viral transcription, replication, proteolytic processing, suppression of host immune responses and suppression of host gene expression. The RNA-dependent RNA polymerase is a target of antiviral

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

therapies.

Molecular Mass	33.8 kDa
Purity	> 95% by SDS-PAGE
Usage	For research purposes only
Storage	Stable for 12 months at -80 centigrade
Storage Buffer	20 mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, 1 mM DTT, 20% Glycerol, 0.02% Na-Azide

GENE INFORMATION

Gene Name	ORF1ab ORF1a polyprotein;ORF1ab polyprotein [Severe acute respiratory syndrome coronavirus 2]
Official Symbol	3C-like proteinase
Synonyms	ORF1ab; ORF1a polyprotein; ORF1ab polyprotein; ORF1a polyprotein; ORF1ab polyprotein; leader protein; nsp2; nsp3; nsp4; 3C-like proteinase; nsp6; nsp7; nsp8; nsp9; nsp10; RNA-dependent RNA polymerase; helicase; 3'-to-5' exonuclease; endoRNase; 2'-O-ribose methyltransferase; leader protein; nsp2; nsp3; nsp4; 3C-like proteinase; nsp6; nsp7; nsp8; nsp9; nsp10; nsp11; YP_009724389.1; pp1ab; translated by -1 ribosomal frameshift; pp1a; Papain-like Protease
Gene ID	43740578
Protein Refseq	YP_009724389

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

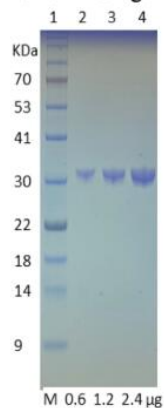
 45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID

P0DTD1

SDS-PAGE

SDS-PAGE gel



1 – MW Marker
2, 3, 4 Mpro

Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA