

SARS-CoV-2 PP1ab Protein (His-MBP)

Cat. No.:	HY-P7894
Synonyms:	rReplicase polyprotein 1ab/2019-nCoV Helicase, His-MBP; SARS-CoV 2 Helicase; SARS-CoV 2 nsp13
Species:	Virus
Source:	E. coli
Accession:	P0DTD1 (A5325-Q5925)
Gene ID:	43740578
Molecular Weight:	Approximately 120.0 kDa

PROPERTIES

AA Sequence

```

AVGACVLCNS   QTSLRGACI   RRPFLCCKCC   YDHVISTSHK
LVL SVN PYVC  NAPGCDVTDV  TQLYLGMSY   YCKSHKPPIS
FPLCANGQVF   GLYKNTCVGS  DNVTDFN AIA TCDWTNAGDY
ILANTCTERL   KLFAAETLKA  TEETFKLSYG  IATVREVLSD
RELHLSWEVG   KPRPPLNRNY  VFTGYRVTKN  SKVQIGEYTF
EKGDYGDVV    YRGTTTTYKLN VGDYFVLTSH  TVMPLSAPTL
VPQEHYVRIT   GLYPTLNISD  EFSSNVANYQ  KVGMMQKYSTL
QGPPGTGKSH   FAIGLALYYP  SARIVYTACS  HAAVDALCEK
ALKYLPIDKC   SRIIPARARV  ECFDKFKVNS  TLEQYVFCTV
NALPETTADI   VVFDEISMAT  NYDLSVVNAR  LRAKHVYVIG
DPAQLPAPRT   LLTKGTLEPE  YFNSVCRMK  TIGPDMFLGT
CRRCPAEIVD   TVSALVYDNK  LKAHKDKSAQ  CFKMFYKGV I
THDVSSA INR  PQIGVVREFL  TRNPAWRKAV  FISPYNSQNA
VASKILGLPT   QTVDS SQGSE  YDYVIFTQTT  ETAHSCNVNR
FNVAITRAKV   GILCIMS DRD  LYDKLQFTSL  EIPRRNVATL
Q
  
```

Appearance

Solution.

Formulation

Supplied as a 0.2 µm filtered solution of PBS, pH 7.4.

Endotoxin Level

/

Reconstitution

N/A

Storage & Stability

Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

Shipping

Shipping with dry ice.

DESCRIPTION

Background

The SARS-CoV-2 PP1ab protein is a multifunctional component crucial for the transcription and replication of viral RNAs, housing the proteinases responsible for polyprotein cleavages. This protein plays a pivotal role in inhibiting host translation by associating with the open head conformation of the 40S subunit, and its C-terminus obstructs the ribosomal mRNA entry tunnel, thereby impeding the antiviral response triggered by innate immunity or interferons. The formation of the nsp1-40S ribosome complex leads to an endonucleolytic cleavage near the 5'UTR of host mRNAs, facilitating their degradation. Notably, viral mRNAs exhibit greater resistance to the nsp1-mediated inhibition of translation due to their 5'-end leader sequence. This multifaceted functionality underscores the strategic role of SARS-CoV-2 PP1ab in manipulating host cellular processes for the benefit of viral replication and evasion of host defenses.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA