Recombinant SARS-CoV-2 Papain-like Protease Protein (His Tag)

Catalog Number:PKSR030511

Note: Centrifuge before opening to ensure complete recovery of vial contents.

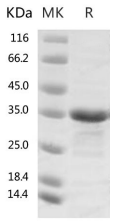
Description

Synonyms	Papain-like Protease;PLpro;PL-PRO;pp1a;Replicase polyprotein 1a
Species	SARS-CoV-2
Expression Host	E.coli
Sequence	Glu1564-Val1880
Accession	YP_009725299.1
Calculated Molecular Weight	36.8 kDa
Tag	N-His
Bioactivity	Measured by its ability to cleave a fluorogenic peptide substrate, Arg-Leu-Arg-Gly-Gly-AMC (RLRGGAMC). The Specific Activity is > 80pmols/min/μg

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM Tris 500mM NaCl, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

The coronaviral proteases, papain-like protease (PLpro) and 3C-like protease (3CLpro), are attractive antiviral drug targets because they are essential for coronaviral replication. PLpro has the additional function of stripping ubiquitin and ISG15 from host-cell proteins to aid coronaviruses in their evasion of the host innate immune responses. Targeting PLpro with antiviral drugs may have an advantage in not only inhibiting viral replication but also inhibiting the dysregulation of signaling cascades in infected cells that may lead to cell death in surrounding, uninfected cells.

For Research Use Only