A Reliable Research Partner in Life Science and Medicine

# Recombinant SARS-CoV-2 Papain-Like Protease Protein

Catalog Number: PKSR030472

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

### Description

Species SARS-CoV-2

Source E.coli-derived SARS-CoV-2 Papain-Like Protease protein Glu 1564-Lys 1878

Calculated MW 35.8 kDa
Observed MW 34 kDa
Accession QHD43415.1

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Concentration** Subject to label value.

**Endotoxin**  $< 1.0 \text{ EU per } \mu\text{g of the protein as determined by the LAL method.}$ 

**Storage** Storage Storage  $4 < -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.

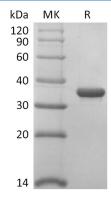
**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 μM filtered solution of 20mM Tris-HCl, 10 mM 2-Mercaptoethanol,

20% Glycerol, pH 7.5.

#### Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Replication of severe acute respiratory syndrome (SARS) coronavirus (SARS-CoV) requires proteolytic processing of the replicase polyprotein by two viral cysteine proteases, a chymotrypsin-like protease (3CLpro) and a papain-like protease (PLpro). These proteases are important targets for development of antiviral drugs that would inhibit viral replication and reduce mortality associated with outbreaks of SARS-CoV. PLpro is a cysteine protease located within the non-structural protein 3 (NS3) section of the viral polypeptide. PLPro activity is required to process the viral polyprotein into functional, mature subunits; specifically, PLPro cleaves a site at the amino-terminus of the viral replicase region. In addition to its role in viral protein maturation, PLPro possesses a deubiquitinating and delSGylating activity. In vivo, this protease antagonizes innate immunity by inhibiting IRF3-induced production of type I interferons.

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