SARS-CoV PLPro (Papain-like Protease)

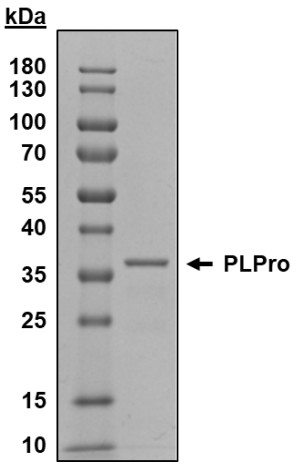
Cat. # DB602

Background: Within the last two decades, SARS and MERS coronaviruses emerged as global health concerns causing severe acute respiratory syndromes. In December 2019, a novel coronavirus (SARS-CoV-2) was identified in Wuhan, Hubei province in China (1-3). The SARS-CoV genome encodes several proteases including papain-like protease 1 (PLP1; PLPro); this key enzyme along with 3CL-protease and PLP2 (PLPro2) drives the early stage of infection by processing a large viral polypeptide into functional enzymes (4). SARS-CoV PLPro shares 82% identity with PLPro from SARS-CoV-2. SARS PLPro is a unique enzyme; it has both deubiquitinase and deISGylase activity (5-9). PLPro represents a possible target for antiviral drugs to inhibit infection by SARS-CoV, MERS-CoV, and SARS-CoV-2.

Alternate names: None

Product Information

Molecular Weight:	35 kDa
Quantity:	25 µg
Physical State:	Liquid
Species:	SARS-CoV
Tag:	None
Activity:	This enzyme is active in the Ub-CHOP and ISG15-CHOP assays.
Storage:	-80° C. Avoid repeated freeze/thaw cycles.



Purified PLPro (1 µg) was separated on 10-20% gradient SDS-PAGE gel and visualized by staining with Coomassie blue. Molecular weight markers are indicated on the left.

References

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