

MATERIAL DATA SHEET

Recombinant MERS-CoV His6 Papain-like Protease

Cat. # E-609

The Papain-like protease ("PLPro") from the human Middle East Respiratory Syndrome (MERS) virus is essential for viral replication. In addition to cleaving the replicase polyprotein at sites located at the N-terminus of the replicase polyprotein, PLPro possesses both deubiquitinating and deISGylating activity and is capable of hydrolyzing polyubiquitin chains. PLPro antagonizes the induction of type I interferon signaling by clocking the phosphorylation and subsequent nuclear translocation of IRF3; it also prevents host NF κ B signaling. MERS PLPro will hydrolyze K6-, K11-, K33-, K48- and K63-linked tetraubiquitin chains in vitro, and will also hydrolyze Ubiquitin-Rh110. This recombinant protein contains an N-terminal 6-His tag.

Product Information

Quantity:	50 μ g
MW:	37 kDa
Source:	<i>E. coli</i> -derived mers-cov Papain-like Protease protein Leu1541 - Ser1859 Accession # K9N638
Stock:	X mg/ml (X μ M) in 50 mM HEPES pH 7.5, 200 mM NaCl, 10% (v/v) Glycerol, 1 mM DTT
Purity:	>90%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use:	Recombinant MERS virus PLPro is a Ubiquitin- and ISG15-deconjugating enzyme. Reaction conditions will need to be optimized for each specific application. We recommend an initial PLPro concentration of 20-100 nM when using Ubiquitin-Rh110 (U-555) substrate and 100-500 nM when using tetraubiquitin substrate.
Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 100 months from date of receipt, -70 °C as supplied.• 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Clasman J.R. et al. (2020) Antiviral Res. doi: 10.1016/j.antiviral.2019.104661

For research use only. Not for use in humans.