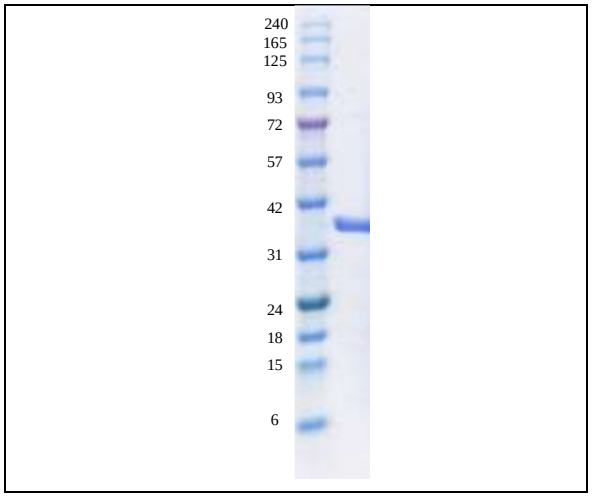
Clonetex Systems Inc.

DATA SHEET

Protein Name: Papain-like Protease/ PLpro	**Project ID:** SARS-CoV2 PL Protease. **Catalog# 102** **Fusion tag(s):** Poly-Histidine tag at C-Terminus
Accession# AAX16191.1 **Source:** Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). A synthetic construct encoding the SARS-CoV-2 Papain-like Protease (Glutamic Acid 1541-Tyrosin 1858 corresponding to polyprotein with accession# AAX16191.1) was expressed with a C-terminal poly-Histidine tag. **Expression Host:** E. coli **Molecular Weight:** 36.7 kDa **Purity:** 95% **Supplied in buffer**: 50 mM Tris-HCl [pH 8.0] + 10% Glycerol + 250 mM NaCl and 5 mM β-Mercaptoehtanol.	**Description:** PLpro is a multifunctional cysteine protease that processes both viral polyprotein and some host-cell proteins (1). It is encoded within the Non-Structural protein 3. PLpro catalyzes the cleavages of N-terminus of the replicase polyprotein to release Nsp1, Nsp2 and Nsp3 and thus it plays a vital role for virus replication and infectivity. PLpro was also confirmed to be significant to antagonize the host's innate immunity (2). As an indispensable enzyme in the process of coronavirus replication and infection of the host (2). PLpro has been a popular target for drug developments to block virus assembly and amplification. 1.Báez-Santos YM, Mielech AM, Deng X, Baker S, Mesecar AD. Catalytic Function and Substrate Specificity of the Papain-Like Protease Domain of nsp3 from the Middle East Respiratory Syndrome Coronavirus. Journal of Virology 88(21), 12511–12527 (2014). 2.S.W. Li, C.Y. Wang, Y.J. Jou, S.H. Huang, L.H. Hsiao, L. Wan, ***et al.*** SARS coronavirus papain-like protease inhibits the TLR7 signaling pathway through removing Lys63-linked polyubiquitination of TRAF3 and TRAF6. Int J Mol Sci, 17 (2016), p. 678 3. Analysis of therapeutic targets for SARS-CoV-2 and discovery of potential drugs by computational methods. Wu et al. Acta Pharmaceutica Sinica B, Volume 10, Issue 5, May 2020, Pages 766-788

Coomassie-blue stained SDS-PAGE under reducing conditions.



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