



DATA SHEET

<p>Protein Name 3CL Protease/ Mprotease</p>	<p>Protein ID: SARS-CoV2 3CL Protease Catalog# 101 Fusion tag(s): Poly-Histidine tag at N-Terminus</p>
<p>Accession# 6LU7_A Source: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). A synthetic construct encoding the SARS-CoV-2 3CL Protease (Serine 1-Glutamine 306) was expressed with an N-terminal poly-histidine tag. Expression Host: E. coli Molecular Weight: 34.7 kDa Purity: 95% Supplied in buffer: 50 mM Tris-HCl [pH 8.0] + 10% Glycerol + 250 mM NaCl and 5 mM β-Mercaptoethanol.</p>	<p>Description: The viral 3-chymotrypsin-like cysteine protease (3CL^{pro} also known as Main Protease/ Mpro) controls coronavirus replication and is essential for its life cycle. This enzyme acts at no less than 11 cleavage sites on the large polyprotein 1ab (about 790 kDa) to generate various non-structural proteins that are important for viral replication [1]. Since this protein plays a critical role for the assembly and propagation of the virus, it is a promising target to develop therapeutic agents that can block its catalytic activity [2]. [1] K. Anand, J. Ziebuhr, P. Wadhwani, et al. Coronavirus main proteinase (3CLpro) structure: basis for design of anti-SARS drugs Science, 300 (2003), pp. 1763-1767. [2] Prediction of the SARS-CoV-2 (2019-nCoV) 3C-like protease (3CLpro) structure: virtual screening reveals velpatasvir, ledipasvir, and other drug repurposing candidates (2020). Crossref DOI link: https://doi.org/10.12688/F1000RESEARCH.22457.2</p>

Coomassie-blue stained SDS-PAGE under reducing conditions.

