Datasheet for ABIN129545

# anti-SARS-CoV-2 NSP5 (3CL-Pro) antibody

1 Image

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## Overview

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| Quantity: | 500 µg |
| Target: | SARS-CoV-2 NSP5 (3CL-Pro) (3CL-PRO, M-Pro) |
| Reactivity: | SARS Coronavirus (SARS-CoV) |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This SARS-CoV-2 NSP5 (3CL-Pro) antibody is un-conjugated |
| Application: | ELISA, Western Blotting (WB) |

## Product Details

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| Immunogen: | This protein A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a purified recombinant protein corresponding to full length SARS Coronavirus 3CL Protease. Lifesensors Inc. prepared the 3CL Protease as follows: SUMO-3CL protease fusion was expressed in E. coli in LB medium and purified by Ni-NTA resin affinity chromatography (Qiagen). After the fusion was cleaved by the SUMO Protease (LifeSensors), the SUMO tag and protease were subtracted from the 3CL protease using MAC and the 3CL protease was finally purified using Anion Exchange Chromatography with the Macro-Prep High Q resin (BioRad) and size exclusion chromatography.<br>Immunogentype:Recombinant |
| Isotype: | IgG |
| Characteristics: | Concentration Definition: by UV absorbance at 280 nm |

## Target Details

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| Target: | SARS-CoV-2 NSP5 (3CL-Pro) (3CL-PRO, M-Pro) |
| Alternative Name: | SARS 3Cl Protease (3CL-PRO, M-Pro Products) |
| Target Type: | Viral Protein |
| Background: | Generally, viruses have proteases to process their proteins into active form. Because of its pivotal role in the viral life cycle, proteases are primary targets for the development of antiviral agents. 3CL protease, a viral cysteine proteinase, plays an important role in co-translational proteolytic processing of Coronavirus polyproteins. The 3CL protease cleaves as much as 11 sites in the replicase polyproteins and also releases the key replicative functions of polymerase and helicase. 3CL protease is the only Coronavirus protein for which structural information is available. 3CL protease comprises three domains, the substrate-binding site is expected to be located between domains I and II, and domain III is a globular cluster comprising five helices. 3CL protease is a homodimer.<br>Synonyms: 3CL PRO antibody, 3CLp antibody, nsp5 antibody |
| Gene ID: | 1489680, 29837498 |
| UniProt: | P0C6U8 |

## Application Details

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| Application Notes: | This protein A purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 34 kDa in size corresponding to SARS 3CL Protease by western blotting in the appropriate cell lysate or extract. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Lyophilized |
| Reconstitution: | Restore with deionized water (or equivalent) |
| Concentration: | 5.0 mg/mL |
| Buffer: | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |

## Handling

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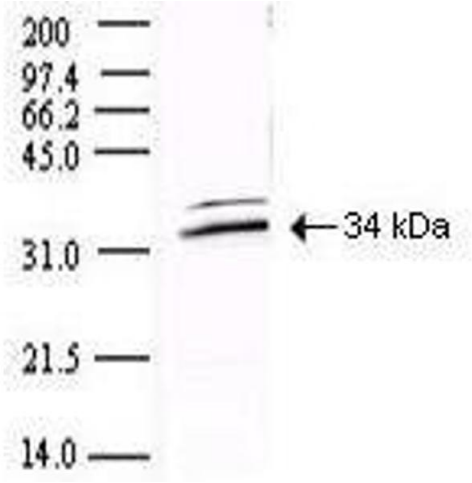
| Storage: | 4 °C |

## Images




**Western Blotting**

**Image 1.** Western blot using Protein A Purified anti-SARS CoV 3CL Protease antibody shows detection of a 34-kDa band corresponding to the protein. Approx. 100 ng of protein was loaded for SDS-PAGE and transferred onto nitrocellulose. The blot was incubated with a 1:5,000 dilution of the antibody at room temperature for 1 h followed by detection using800 labeled Goat-a-Rabbit IgG [H&L] diluted 1:10,000. The fluorescence image was captured using the Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.