

A20831

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# SARS-CoV-2 3CLpro Rabbit mAb

Catalog No.: A20831

Recombinant

## Basic Information

### Observed MW

30-35kDa

### Calculated MW

141kDa

### Category

SMab Recombinant Monoclonal Antibody

### Applications

WB,IF/ICC,ELISA

### Cross-Reactivity

SARS-CoV-2

### CloneNo number

ARC50779

## Recommended Dilutions

**WB** 1:2000 - 1:6000

**IF/ICC** 1:200 - 1:800

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Contact

 [www.abclonal.com](http://www.abclonal.com)

## Background

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped, positive-sense, single-stranded RNA virus that causes coronavirus disease 2019 (COVID-19). Virus particles include the RNA genetic material and structural proteins needed for invasion of host cells. Once inside the cell the infecting RNA is used to encode structural proteins that make up virus particles, nonstructural proteins that direct virus assembly, transcription, replication and host control and accessory proteins whose function has not been determined.~ ORF1ab, the largest gene, contains overlapping open reading frames that encode polyproteins PP1ab and PP1a. The polyproteins are cleaved to yield 16 nonstructural proteins, NSP1-16. Production of the longer (PP1ab) or shorter protein (PP1a) depends on a -1 ribosomal frameshifting event. The proteins, based on similarity to other coronaviruses, include the papain-like proteinase protein (NSP3), 3C-like proteinase (NSP5), RNA-dependent RNA polymerase (NSP12, RdRp), helicase (NSP13, HEL), endoRNAse (NSP15), 2'-O-Ribose-Methyltransferase (NSP16) and other nonstructural proteins. SARS-CoV-2 nonstructural proteins are responsible for viral transcription, replication, proteolytic processing, suppression of host immune responses and suppression of host gene expression. The RNA-dependent RNA polymerase is a target of antiviral therapies.

## Immunogen Information

### Gene ID

43740578

### Swiss Prot

P0DTC2

### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

Spike glycoprotein; S; SARS-CoV-2 3CLpro

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

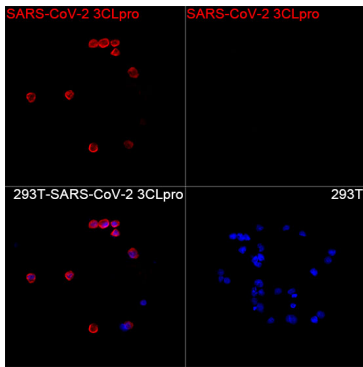
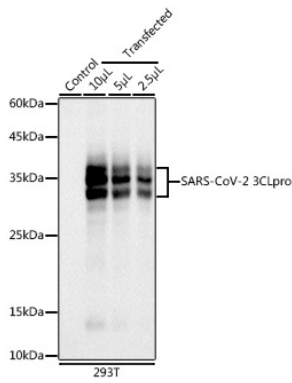
Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

## Validation Data



Immunofluorescence analysis of 293T cells transfected with SARS-CoV-2 3CLpro using SARS-CoV-2 3CLpro Rabbit mAb (A20831) at a dilution of 1:400 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.