

SARS-CoV-2 3CLpro Rabbit mAb

Catalog No.: A22451 Recombinant

Basic Information

Observed MW

30-35kDa

Calculated MW

141kDa

Category

Primary antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

SARS-CoV-2

CloneNo number

ARC50786

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.

Recommended Dilutions

WB 1:1000 - 1:5000

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

Immunogen Information

Gene ID

43740578

Swiss Prot

P0DTC2

Immunogen

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

Synonyms

Contact

 | 400-999-6126

 | cn.market@abclonal.com.cn
 | www.abclonal.com.cn

Product Information

Source

Rabbit

Isotype

IgG

Purification

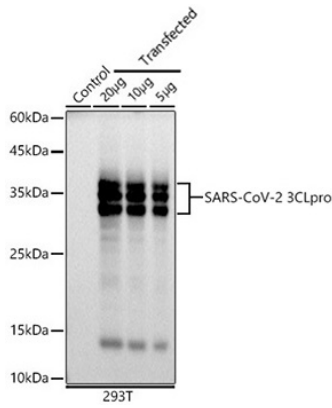
Affinity purification

Storage

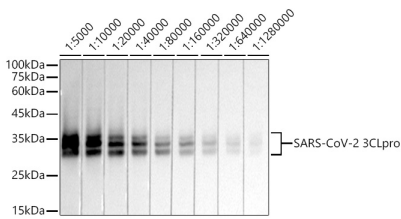
Store at -20°C. Avoid freeze / thaw cycles.

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.

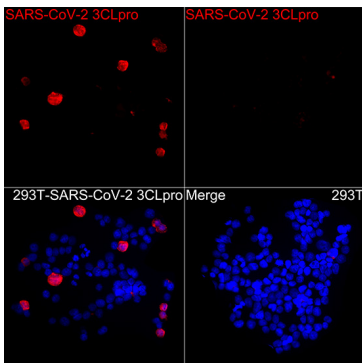
Validation Data



Western blot analysis of lysates from wild type (WT) and 293T cells transfected with SARS-CoV-2 3CLpro using SARS-CoV-2 3CLpro Rabbit mAb (A22451) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 20µg/10µg/5µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 3s.



Western blot analysis of lysates from wild type (WT) and 293T cells transfected with SARS-CoV-2 3CLpro using SARS-CoV-2 3CLpro Rabbit mAb (A22451) at 1:5000-1:1280000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 20µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 20s.



Immunofluorescence analysis of 293T cells transfected with SARS-CoV-2 3CLpro using SARS-CoV-2 3CLpro Rabbit mAb (A22451) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.