

A22451

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SARS-CoV-2 3CLpro Rabbit mAb

Catalog No.: A22451

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

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	1:500 - 1:1000
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID	Swiss Prot
43740578	PODTC2

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-306 of coronavirus SARS-CoV-2 3CLpro (YP_009725295.1).

Synonyms

Contact

 www.abclonal.com

Product Information

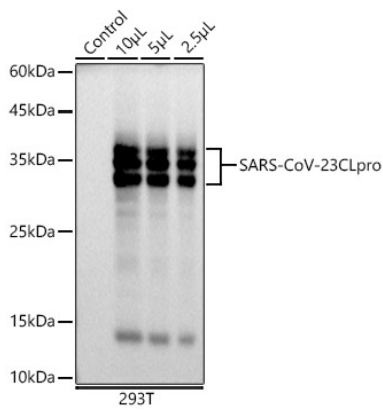
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

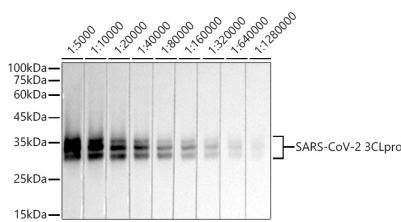
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

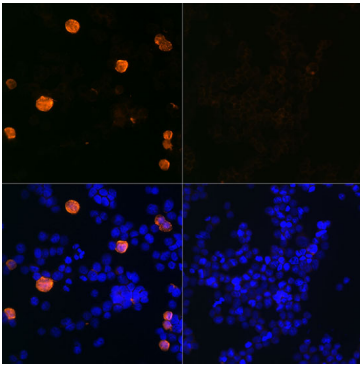
Validation Data



Western blot analysis of various lysates, using SARS-CoV-2 3CLpro Rabbit mAb (A22451) at 1:200 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 3s.



Western blot analysis of lysates from 293T-SARS-CoV-2 3CLpro(His-Tag), using SARS-CoV-2 3CLpro Rabbit mAb (A22451) at 1:5000-1:1280000 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20s.



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