

Rabbit COVID 19 ORF3a Coronavirus Polyclonal Antibody | anti-COVID-19 antibody

SARS-CoV-2 (COVID-19) ORF3a Antibody

CATALOG # AAA40931	HOST Rabbit	REACTIVITY Virus	APPLICATIONS Immunohistochemistry, ELISA
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PRODUCT SYNONYMS

COVID 19 ORF3a Coronavirus; Polyclonal Antibody; SARS-CoV-2 (COVID-19) ORF3a Antibody; 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; ORF3a; ORF3a protein; Accessory protein 3a; Protein 3a; Protein U274; Protein X1; anti-COVID-19 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Virus
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	SARS-CoV-2 (COVID-19) ORF3a Antibody is affinity chromatography purified via peptide column.
Form/Format	Liquid. SARS-CoV-2 (COVID-19) ORF3a antibody is supplied in PBS containing 0.02% sodium azide.
Concentration	1mg/mL (varies by lot)
Applicable Applications for anti-COVID-19 antibody	IHC (Immunohistochemistry), ELISA
Organism	Severe acute respiratory syndrome coronavirus 2
Immunogen	Anti-SARS-CoV-2 (COVID-19) ORF3a antibody was raised against a peptide corresponding to 15 amino acids near the amino-terminus of SARS-CoV-2 (COVID-19) ORF3a protein. The immunogen is located within the first 50 amino acids of the SARS-CoV-2 (COVID-19) ORF3a protein.
Conjugation	Unconjugated
Protein GI#	1835921851
Preparation and Storage	SARS-CoV-2 (COVID-19) ORF3a antibody can be stored at 4 degree C for three months and -20 degree C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

IMAGES



ELISA

Figure 2 ELISA Validation Antibodies: SARS-CoV-2 (COVID-19) ORF3a Antibody, 9275. A direct ELISA was performed using SARS-CoV-2 ORF3a immunogen peptide) as coating antigen and the anti-SARS-CoV-2 (COVID-19) ORF3a antibody as the capture antibody. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:20000 dilution. Detection range is from 0.3 ng/mL to 1000 ng/mL



IHC (Immunohistochemistry)

Figure 1 Immunohistochemistry Validation of SARS-CoV-2 (COVID-19) ORF3a in COVID-19 Patient Lung Immunohistochemical analysis of paraffin-embedded COVID-19 patient lung tissue using anti- SARS-CoV-2 (COVID-19) ORF3a antibody (0.2 μg/mL). Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4˚C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin. Strong signal of SARS-COV-2 ORF3a protein was observed in macrophages of COVID-19 patient lung, but not in non-COVID-19 patient lung.

ADDITIONAL INFORMATION

Related Product Information for anti-COVID-19 antibody	Coronavirus disease 2019 (COVID-19), formerly known as 2019-nCoV acute respiratory disease, is an infectious disease caused by SARS-CoV-2, a virus closely related to the SARS virus (1). The disease is the cause of the 2019-20 coronavirus outbreak (2). SARS-CoV-2 virus proteins include structural proteins, non-structural proteins and accessory factors. The structure of SARS-CoV-2 consists of the following: a spike protein (S), hemagglutinin-esterase dimer (HE), a membrane glycoprotein (M), an envelope protein (E) a nucleocapsid protein (N) and RNA. SARS-CoV-2 non-structural protein is ORF1ab that consists of 16 proteins (nsp1-nsp16), while accessory factors include ORF3a, ORF3b, ORF6, ORF7a, ORF7b, ORF8, ORF9b, ORF9c and ORF10. ORF3a forms homotetrameric potassium sensitive ion channels (viroporin) and may modulate virus release. It up-regulates expression of fibrinogen subunits FGA, FGB and FGG in host lung epithelial cells. It induces apoptosis in cell culture and downregulates the type 1 interferon receptor by inducing serine phosphorylation within the IFN alpha-receptor subunit 1 (IFNAR1) degradation motif and increasing IFNAR1 ubiquitination (3).
Product Categories/Family for anti-COVID-19 antibody	Infectious Disease; COVID-19
References	Gorbalenya. bioRxiv: 2020. Hui et al. Int J Infect Dis. 2020;91:264-266. Lu et al. PNAS USA. 2006; 103:12540-12545.

NCBI AND UNIPROT INFORMATION

NCBI GeneID	43740569
UniProt Accession #	P0DTC3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/covid-19-orf3a-coronavirus-antibody-immunohistochemistry-elisa/40931>