ARG43725
anti-SARS-CoV-2 ORF3a antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizesSARS-CoV-2 ORF3a
Tested Reactivity	Virus
Tested Application	ELISA, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SARS-CoV-2 ORF3a
Species	Virus
Immunogen	Synthetic 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	Un-conjugated
Alternate Names	ORF3a protein, Accessory protein 3a, Protein 3a, Protein U274, Protein X1, ORF3a

Application Instructions

Application table

Application	Dilution
ELISA	detect 2 ng of free peptide at 1 µg/mL
IHC-P	0.2 µg/mL

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

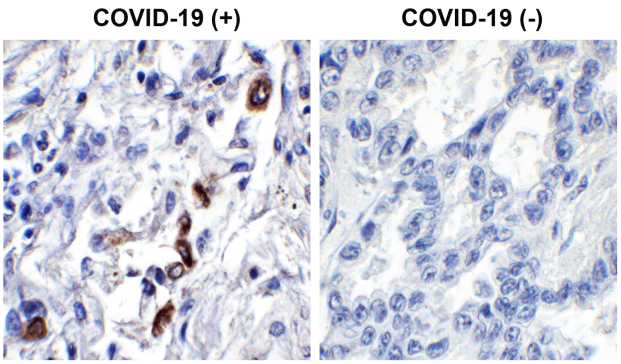
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide.
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

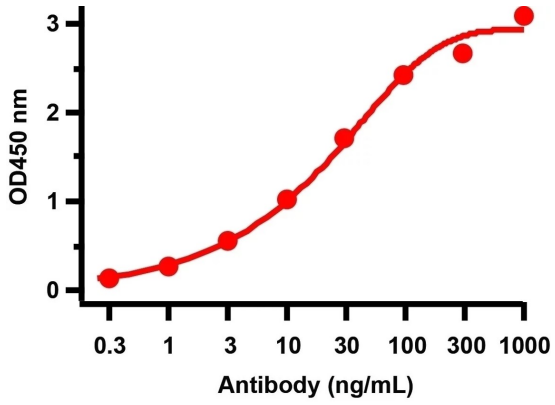
Gene Symbol	ORF3a
Gene Full Name	SARS-CoV-2 ORF3a
Background	Coronavirus disease 2019 (COVID-19), formerly known as 2019-nCoV acute respiratory disease, is an infectious disease caused by SARS-CoV-2, a virus closely related to the SARS virus. The disease is the cause of the 2019–20 coronavirus outbreak. 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-esterease dimer (HE), a membrane glycoprotein (M), an envelope protein (E) a nucleoclapid 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.
Highlight	Related products: SARS-CoV antibodies; SARS-CoV ELISA Kits; SARS-CoV recombinant proteins; Anti-Rabbit IgG secondary antibodies; Related news: HMGB1, a biomarker and therapeutic target in COVID-19

Images



ARG43725 anti-SARS-CoV-2 ORF3a antibody IHC-P image

Immunohistochemistry: Paraffin-embedded COVID-19 patient lung tissue (left) or health control (right) lung tissue were fixed with formaldehyde and blocked with 10% serum for 1 hour at RT. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0). The tissue section was stained with ARG43725 anti-SARS-CoV-2 ORF3a antibody at 0.2 µg/mL dilution, overnight at 4°C. Counter stained with Hematoxylin.



ARG43725 anti-SARS-CoV-2 ORF3a antibody ELISA image

Direct ELISA: SARS-CoV-2 ORF3a immunogen peptide was coated on the plate and ARG43725 anti-SARS-CoV-2 ORF3a antibody was used 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