## abcam

#### Product datasheet

# Anti-SARS-CoV-2 spike glycoprotein antibody - Coronavirus ab272504

\* ★ ★ ★ ★ ★ 5 Abreviews 34 References 5 Images

#### Overview

Product name Anti-SARS-CoV-2 spike glycoprotein antibody - Coronavirus

**Description** Rabbit polyclonal to SARS-CoV-2 spike glycoprotein - Coronavirus

Host species Rabbit

**Specificity** The immunogen for ab272504 is within the last 50 aa of the spike protein - a peptide

corresponding to 20 amino acids near the carboxy terminus of SARS-CoV-2 (COVID-19) Spike glycoprotein. The Extracellular domain (ECD) is from aa 1 to 1208 (full length 1273aa). Therefore, this antibody detects the transmembrane and cytoplasm domains at the C terminus, but does not detect the ECD (which is the region expressed in many commercially available spike proteins). ab272504 can be used for the detection of full length spike protein and spike protein in COVID-19

patient samples. It will detect 4 ng of free peptide at 1  $\mu$ g/mL.

Tested applications Suitable for: IHC-P, ICC/IF, ELISA, WB

Species reactivity Reacts with: SARS-CoV-2

**Immunogen** Synthetic peptide within Human coronavirus SARS-CoV-2 Spike Glycoprotein (C terminal). The

exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. 20 amino acid peptide

within the last 50 amino acids of the SARS CoV-2 spike glycoprotein

Database link: **QHD43416** (Peptide available as **ab273063**)

Positive control WB: HEK-293 cells overexpressing SARS-CoV-2 spike glycoprotein, cell lysate. ICC: HEK-293

cells overexpressing SARS-CoV-2 spike glycoprotein. IHC-P: COVID-19 patient lung tissue.

General notes Applications overview

Tick: Tested and Guaranteed to work X: Will not work —: No data

	WB	IHC	ICC	Flow Cyt	ELISA	IP
SARS-CoV	-	-	-	-	-	-
SARS-CoV2	<b>V</b>	Reviews ②	✓	-	<b>✓</b>	-

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

1

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C.

Storage buffer pH: 7.2

Preservative: 0.02% Sodium azide

Constituent: PBS

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

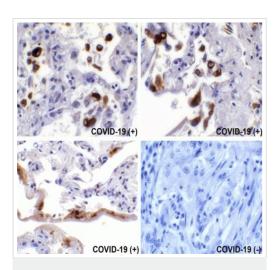
#### The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab272504 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

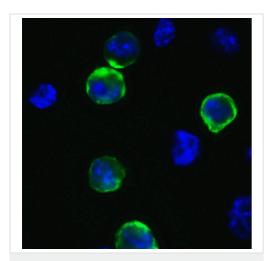
Application	Abreviews	Notes
IHC-P	<b>★★★★★</b> ( <u>3)</u>	Use a concentration of 0.2 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 1 µg/ml.
ELISA		Use a concentration of 1 µg/ml.
WB		Use a concentration of 1 µg/ml. Can be blocked with <u>Human</u> coronavirus SARS-CoV-2 spike glycoprotein peptide (ab273063).

#### **Images**



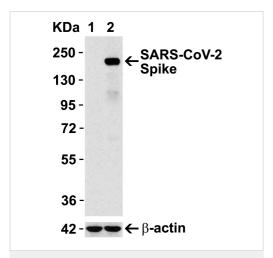
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SARS-CoV-2 spike glycoprotein antibody - Coronavirus (ab272504)

Immunohistochemical analysis of paraffin-embedded COVID-19 patient lung tissue using anti-SARS-CoV-2 (COVID-19) Spike S2 antibody (ab272504, 0.5 µg/mL). Tissue was fixed with formaldehyde and blocked with 10% serum for 1 hour at room temperature; 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 lgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin. Strong spike protein signal was observed in macrophages and airway epithelium of COVID-19 patient lung but not in non-COVID-19 patient lung.

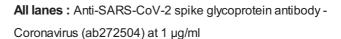


Immunocytochemistry/ Immunofluorescence - Anti-SARS-CoV-2 spike glycoprotein antibody -Coronavirus (ab272504)

Immunofluorescent analysis of 4% paraformaldehyde-fixed 293 spike transfected cells labelling SARS-CoV-2 (Covid-19) Spike with ab272504 at 1  $\mu$ g/mL, followed by goat anti-rabbit lgG secondary antibody at 1/500 dilution (green) and DAPI staining (blue).



Western blot - Anti-SARS-CoV-2 spike glycoprotein antibody - Coronavirus (ab272504)



Lane 1: Wild-type HEK-293 cell lysate

**Lane 2**: HEK-293 overexpressing SARS-CoV-2 spike glycoprotein, cell lysate

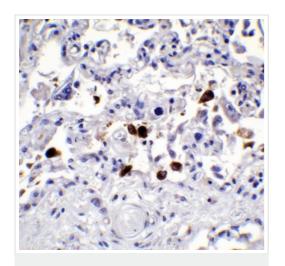
Lysates/proteins at 15 µg per lane.

#### **Secondary**

All lanes: Goat anti-rabbit lgG HRP conjugate at 1/10000 dilution

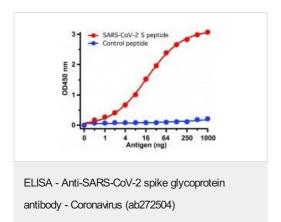
Primary incubation for 1 hour at room temperature.

Blocking and dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SARS-CoV-2 spike glycoprotein antibody - Coronavirus (ab272504)

Immunohistochemical analysis of paraffin-embedded COVID-19 patient lung tissue using anti-SARS-CoV-2 (COVID-19) Spike S2 antibody (ab272504, 0.5 μg/mL). Tissue was fixed with formaldehyde and blocked with 10% serum for 1 hour at room temperature; 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 lgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin. Strong spike protein signal was observed in macrophages of COVID-19 patient lung.



A direct ELISA was performed using antigen or control peptide as coating antigen and ab272504 as the capture antibody at 1  $\mu$ g/ml, followed by the secondary antibody goat anti-rabbit lgG HRP conjugate at 1/20000 dilution. Detection range was from 0.5 ng/ml to 1000 ng/ml.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors