abcam

Product datasheet

Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric ab272854

Recombinant

★★★★★ 3 Abreviews 6 Images

Overview

Product name	Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric
Description	Human monoclonal [H6] to SARS-CoV-2 spike glycoprotein - Chimeric
Host species	Human
Specificity	We have in-house data that suggests this product also reacts with SARS-CoV-1 spike protein in Western blot.
Tested applications	**Suitable for:** ELISA, WB, Functional Studies
Species reactivity	**Reacts with:** SARS-CoV, SARS-CoV-2
Immunogen	Recombinant fragment corresponding to Human SARS-CoV-2 spike glycoprotein aa 16-685. Database link: P0DTC2
Positive control	WB: SARS-Cov1 spike protein transfected Expi cell lysate, SARS-Cov1 3xFlag spike protein transfected Expi cell lysate, SARS-Cov2 spike protein transfected Expi cell lysate and SARS-Cov2 3xFlag spike protein transfected Expi cell lysate.
General notes	Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854) is a recombinant human/mouse chimeric monoclonal antibody consisting of Mouse scFv fused with human IgG1. As the Fc region is human, an anti-Human secondary antibody should be used for detection.

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	✓	–	Reviews ①	–	✓	–

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

Storage buffer	pH: 7.40 Constituents: 0.03% Proclin 300, 50% Glycerol, PBS
Purity	>90% by SDS-PAGE
Purification notes	Screened the positive clones from mouse ScFv antibody libraries, then expressed in 293F cells.
Clonality	Monoclonal
Clone number	H6
Isotype	IgG1

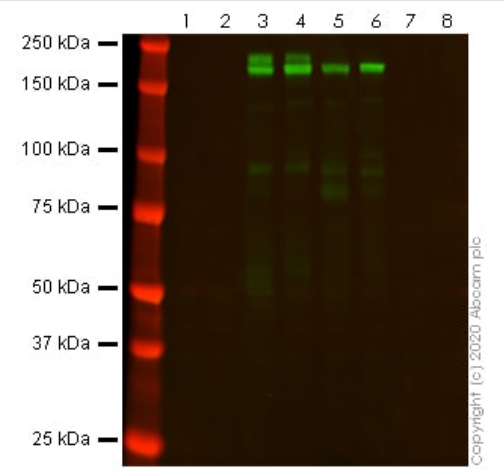
Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab272854 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
ELISA	★★★★☆ (1)	1/10000 - 1/50000.
WB		Use a concentration of 1 µg/ml.
Functional Studies		Use at an assay dependent concentration.

Images



Western blot - Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854)

All lanes : Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854) at 1 µg/ml

Lane 1 : Mock transfected Expi cell lysate
Lane 2 : PDL-1 Flag transfected Expi cell lysate
Lane 3 : SARS-Cov1 spike protein transfected Expi cell lysate
Lane 4 : SARS-Cov1 3xFlag spike protein transfected Expi cell lysate
Lane 5 : SARS-Cov2 spike protein transfected Expi cell lysate
Lane 6 : SARS-Cov2 3xFlag spike protein transfected Expi cell lysate
Lane 7 : MERS Spike protein transfected Expi cell lysate
Lane 8 : MERS 3xFlag Spike protein transfected Expi cell lysate

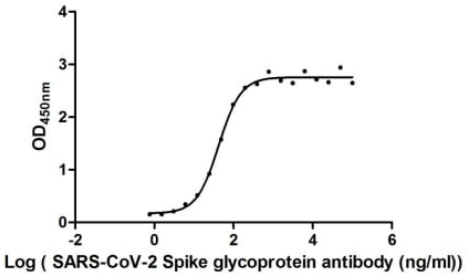
Lysates/proteins at 10 µg per lane.

Performed under reducing conditions.

Observed band size: 200 kDa

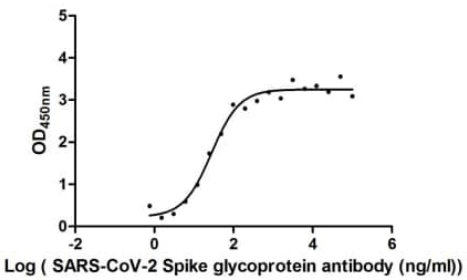
Lanes 1 - 8: Merged signal (red and green). Green - ab272854 observed at 200 kDa. Red - loading control.

ab272854 was shown to react with SARS-CoV-2 spike glycoprotein in western blot. Membranes were blocked in 3% milk before incubation with ab272854 overnight at 4°C at 1 ug/ml. Blots were incubated with Donkey anti-Mouse IgG H&L(IRDye® 800CW) preabsorbed (ab216774) antibody at 1 in 20000 dilution for 1 hour at room temperature before imaging.



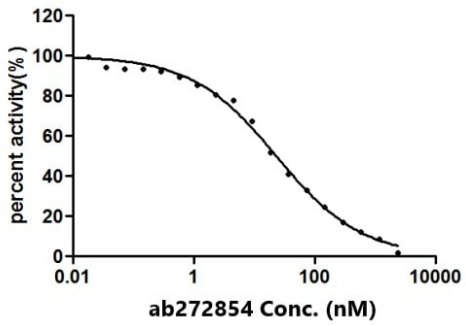
ELISA - Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854)

Binding Activity of ab272854 with SARS-CoV-2 spike glycoprotein. Activity: Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2 spike glycoprotein at 2 µg/ml can bind ab272854. The EC_{50} of ab272854 is 36.79-48.87 ng/ml.



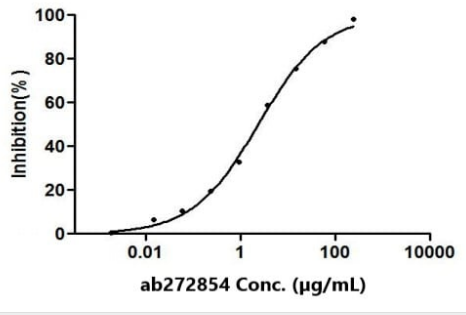
ELISA - Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854)

Binding Activity of ab272854 with SARS-CoV-2-S1-RBD Activity: Measured by its binding ability in a functional ELISA. Immobilized SARS-CoV-2-S1-RBD at 2 µg/ml can bind ab272854, the EC_{50} of SARS-CoV-2-S Antibody is 19.60-39.42 ng/ml.



Functional Studies - Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854)

Binding signal of Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854) and SARS-CoV-2-S1-RBD was inhibited by ACE2 protein-HRP conjugated inhibitor with the IC_{50} 23.32 nM.



Functional Studies - Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854)

Binding signal of Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854) and SARS-CoV-2-S1-RBD was inhibited by ACE2 protein-HRP conjugated inhibitor with the IC_{50} 2.38 µg/mL.

Anti-SARS-CoV-2 spike glycoprotein antibody [H6] - Chimeric (ab272854)

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