abcam

Product datasheet

Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [EPR24852-116] - BSA and Azide free ab283943

Recombinant RabMAb

3 Images

Overview

Product name	Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [EPR24852-116] - BSA and Azide free
Description	Rabbit monoclonal [EPR24852-116] to SARS-CoV-2 Spike Glycoprotein S1 - BSA and Azide free
Host species	Rabbit
Specificity	Our data (not shown) suggests this RabMAb is interacting with the non-receptor binding domain of SARS-CoV-2 Spike Glycoprotein S1 with a higher affinity (~ 71x) than the receptor binding domain of SARS-CoV-2 Spike Glycoprotein S1. This antibody cross-reacts with the SARS-CoV-2 Omicron variant spike protein.
Tested applications	**Suitable for:** ELISA, WB, Dot blot
Species reactivity	**Reacts with:** SARS-CoV-2
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: SARS-CoV-2 ORF8. ELISA: SARS-CoV2 ORF8.
General notes	ab283943 is the carrier-free version of **ab283942** Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information **see here**.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR24852-116
Isotype	IgG

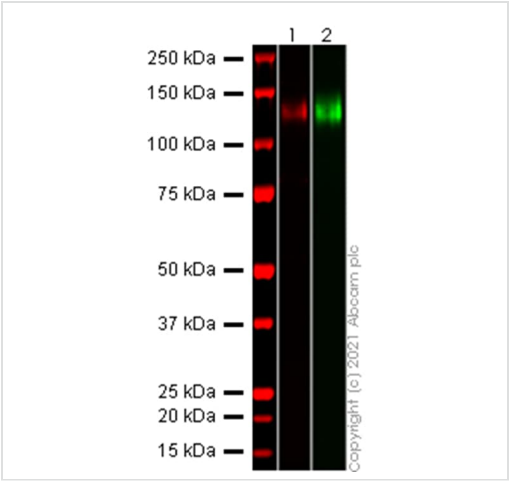
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab283943 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		Use a concentration of 4e-005 - 0.1 µg/ml.
WB		1/1000.
Dot blot		1/1000.

Images



Western blot - Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [EPR24852-116] - BSA and Azide free (ab283943)

All lanes : Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [EPR24852-116] (**ab283942**) at 1/1000 dilution

All lanes : Recombinant human coronavirus SARS-CoV-2 Spike Glycoprotein S1 (Active) (**ab273068**)

Lysates/proteins at 0.2 µg per lane.

This data was developed using **ab283942**, the same antibody clone in a different buffer formulation.

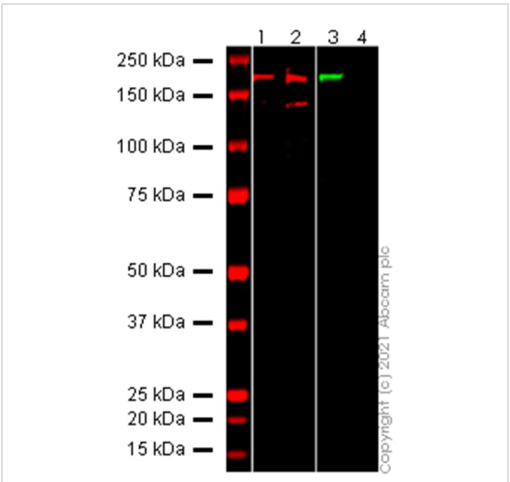
Secondaries

Lane 1: Red – loading control Mouse anti-6x His tag antibody (**ab18184**) observed at 135 kDa

Lanes 2: Green – **ab283942** observed at 135 kDa

ab283942 was shown to bind specifically to SARS-CoV-2 spike glycoprotein S1 in Western blot. Samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) at 1/20000 dilution.

Blocking buffer: 3% milk in TBS-0.1% Tween® 20 (TBS-T)



Western blot - Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [EPR24852-116] - BSA and Azide free (ab283943)

All lanes : Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [EPR24852-116] (**ab283942**) at 1/1000 dilution

Lanes 1 & 3 : Expi293 cells transfected with SARS-CoV2 3xFlag Spike Protein
Lanes 2 & 4 : Expi293 cells transfected with SARS-CoV1 3xFlag Spike Protein

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Donkey anti-Goat IgG H&L (IRDye® 800CW) preadsorbed (**ab216775**) and Donkey anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216779**) at 1/20000 dilution. at 1/20000 dilution

This data was developed using **ab283942**, the same antibody clone in a different buffer formulation.

Observed band size: 200 kDa

Calculated: 140kDa

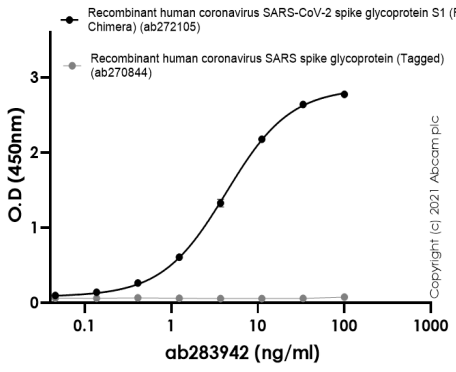
Secondaries

Lane 1 & 2: Red – loading control Goat anti-DDDDK tag antibody (**ab95045**, Binds to FLAG tag sequence) observed at 200 kDa

Lanes 3 & 4: Green – **ab283942** observed at 200 kDa

ab283942 was shown to bind specifically to SARS-CoV-2 spike glycoprotein S1 in Western blot. Samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Donkey anti-Goat IgG H&L (IRDye® 800CW) preadsorbed (**ab216775**) and Donkey anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216779**) at 1/20000 dilution.

Blocking buffer: 3% milk in TBS-0.1% Tween® 20 (TBS-T)



ELISA - Anti-SARS-CoV-2 Spike Glycoprotein S1 antibody [EPR24852-116] - BSA and Azide free (ab283943)

This data was developed using **ab283942**, the same antibody clone in a different buffer formulation.

Indirect ELISA showing primary antibody **ab283942** binding to the antigen **ab272105** (recombinant human coronavirus SARS-CoV-2 spike glycoprotein S1 (Fc Chimera)). Plates were coated with recombinant human coronavirus SARS-CoV-2 spike glycoprotein S1 (Fc Chimera, **ab272105**) and recombinant human coronavirus SARS spike glycoprotein (Tagged, **ab270844**) at 1000 ng/ml. Binding of **ab283942** was assessed in a serial dilution range 0.04-100 ng/mL (a 3-fold serial dilution).

Binding was detected using pre-adsorbed secondary antibody, goat anti-rabbit IgG H&L (HRP, **ab97080**) at 1/2000 dilution.

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