

# SARS-CoV-2 Spike Protein S1/S2 Polyclonal Antibody

## Product Details

Size	100 µg
Species Reactivity	Virus
Published Species	Hamster, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	peptide corresponding to 20 amino acids near the carboxy terminus of SARS-CoV-2(COVID-19, 2019-nCoV) Spike glycoprotein.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS
Contains	0.02% sodium azide
Storage conditions	4° C
RRID	AB_2866784

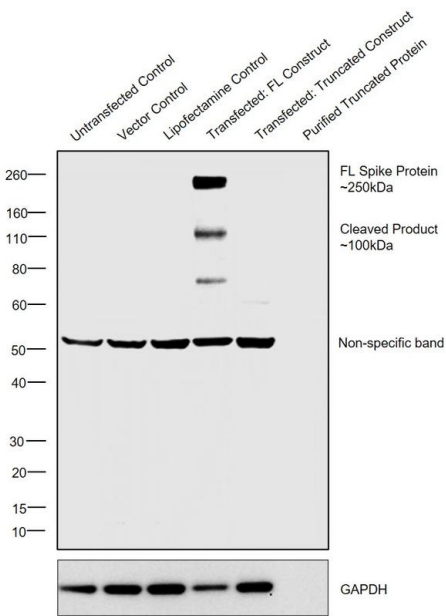
Applications	Tested Dilution	Publications
Western Blot (WB)	1 µg/mL	2 Publications
Flow Cytometry (Flow)	-	2 Publications
ELISA (ELISA)	1 µg/mL	1 Publication
Neutralization (Neu)	-	1 Publication
In vitro Assay (IV)	-	1 Publication

## Product Specific Information

The immunogen is located within the last 50 amino acids of SARS-CoV-2 (COVID-19, 2019-nCoV) Spike protein.

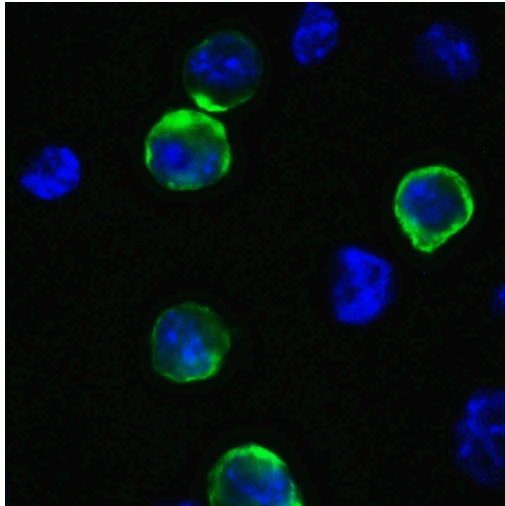
Predicted reactivity based on immunogen sequence: SARS-CoV Spike proteins: (100%)

Product Images For SARS-CoV-2 Spike Protein S1/S2 Polyclonal Antibody



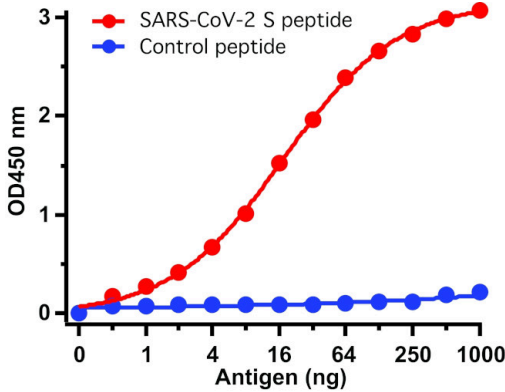
SARS-CoV-2 Spike Protein S1/S2 Antibody (PA5-112048) in WB

Western blot was performed using Anti-SARS-CoV-2 Spike Protein S1/S2 Polyclonal Antibody (Product # PA5-112048) by loading 30 µg of whole cell extracts of untransfected and transiently transfected HEK-293 lysates: untransfected (Lane 1), empty vector control (Lane 2), lipofectamine control (Lane 3), transfected full-length spike protein construct (1-1273aa) (Lane 4), transfected truncated spike protein construct (1-1208aa) (Lane 5) and 250 ng purified truncated protein (1-1208aa) (Lane 6) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). A ~250 kDa band corresponding to full-length SARS-CoV-2 spike protein was observed in HEK293E lysates transfected with full-length spike protein construct (Lane 4) on probing with the primary antibody (1 µg/mL) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP (Product # A27036, 1:4000 dilution) using the iBright FL 1500 (Product # A44241). Spike protein was not observed in Lane 5, Lane 6 as the truncated construct lacks the immunogen region of the SARS-CoV-2 Spike Protein S1/S2 Polyclonal Antibody (Product # PA5-112048).



SARS-CoV-2 Spike Protein S1/S2 Antibody (PA5-112048) in ICC/IF

Immunofluorescent analysis of 4% paraformaldehyde-fixed 293T cells labeling SARS-CoV-2 (COVID-19) Spike with SARS-CoV-2 Spike Protein S2 Polyclonal Antibody (Product # PA5-112048) at 1 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1:500 dilution (green) and DAPI staining (blue).



SARS-CoV-2 Spike Protein S1/S2 Antibody (PA5-112048) in ELISA

A direct ELISA was performed using immunogen or control peptide as coating antigen and SARS-CoV-2 Spike Protein S2 Polyclonal Antibody (Product # PA5-112048) (1 µg/mL) as the detection antibody. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:20,000 dilution. Detection range is from 0.5 ng/mL to 1,000 ng/mL.

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## Western Blot (2)

<p><b>Nature communications</b></p> <p><b>The SARS-CoV-2 Omicron BA.1 spike G446S mutation potentiates antiviral T-cell recognition.</b></p> <p>"PA5-112048 was used in Western Blotting to demonstrate that the G446S mutation in the Omicron BA.1 variant affects antigen processing/presentation and potentiates antiviral activity by vaccine-induced T cells, leading to enhanced T cell recognition towards emerging variants."</p> <p>Authors: Motozono C, Toyoda M, Tan TS, Hamana H, Goto Y, Aritsu Y, Miyashita Y, Oshiumi H, Nakamura K, Okada S, Uda K, Kitamatsu M, Kishi H, Ueno T</p>	<p><b>Year</b> 2022</p> <p><b>Species</b> Human</p> <p><b>Dilution</b> 1:2000</p>
<p><b>bioRxiv : the preprint server for biology</b></p> <p><b>Variations in cell-surface ACE2 levels alter direct binding of SARS-CoV-2 Spike protein and viral infectivity: Implications for measuring Spike protein interactions with animal ACE2 orthologs.</b></p> <p>"PA5-112048 was used in Western Blot to describe a method to generate cells stably expressing equivalent levels of different ACE2 orthologs, the receptor for SARS-CoV-2, on the surface of a human cell line."</p> <p>Authors: Kazemi S, López-Muñoz AD, Hollý J, Jin L, Yewdell JW, Dolan BP</p>	<p><b>Year</b> 2021</p> <p><b>Species</b> Hamster</p>

## Flow Cytometry (2)

<p><b>Nature</b></p> <p><b>Altered TMPRSS2 usage by SARS-CoV-2 Omicron impacts infectivity and fusogenicity.</b></p> <p>"Published figure using SARS-CoV-2 Spike Protein S1/S2 polyclonal antibody (Product # PA5-112048) in Flow Cytometry"</p> <p>Authors: Meng B, Abdullahi A, Ferreira IATM, Goonawardane N, Saito A, Kimura I, Yamasoba D, Gerber PP, Fatihi S, Rathore S, Zepeda SK, Papa G, Kemp SA, Ikeda T, Toyoda M, Tan TS, Kuramochi J, Mitsunaga S, Ueno T, Shirakawa K, Takaori-Kondo A, Brevini T, Mallery DL, Charles OJ, Bowen JE, Joshi A, Walls AC, Jackson L, Martin D, Smith KGC, Bradley J, Briggs JAG, Choi J, Madisson E, Meyer KB, Mlcochova P, Ceron-Gutierrez L, Doffinger R, Teichmann SA, Fisher AJ, Pizzuto MS, de Marco A, Corti D, Hosmillo M, Lee JH, James LC, Thukral L, Veessler D, Sigal A, Sampaziotis F, Goodfellow IG, Matheson NJ, Sato K, Gupta RK</p>	<p><b>Year</b> 2022</p> <p><b>Species</b> Human</p> <p><b>Dilution</b> 1:100</p>
<p><b>Cell reports</b></p> <p><b>The SARS-CoV-2 Lambda variant exhibits enhanced infectivity and immune resistance.</b></p> <p>"PA5-112048 was used in Flow Cytometry to reveal that the spike protein of the Lambda variant is more infectious than that of other variants due to the T76I and L452Q mutations."</p> <p>Authors: Kimura I, Kosugi Y, Wu J, Zahradnik J, Yamasoba D, Butlertanaka EP, Tanaka YL, Uriu K, Liu Y, Morizako N, Shirakawa K, Kazuma Y, Nomura R, Horisawa Y, Tokunaga K, Ueno T, Takaori-Kondo A, Schreiber G, Arase H, Motozono C, Saito A, Nakagawa S, Sato K</p>	<p><b>Year</b> 2022</p> <p><b>Species</b> Human</p>

## More applications with references on thermofisher.cn

- ELISA (1)
- Neu (1)
- IV (1)

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