

Datasheet for 600-406-MS9**SARS-CoV-2 Whole Spike Protein Antibody Biotin Conjugated****Overview**

Description:	Anti-SARS-CoV-2 Whole Spike Protein (RABBIT) Antibody Biotin Conjugated - 600-406-MS9
Item No.:	600-406-MS9
Size:	100 µg
Applications:	ELISA
Reactivity:	SARS-CoV-2
Host Species:	Rabbit

Product Details

Background:	SARS-CoV-2 (Severe acute respiratory syndrome coronavirus 2) the virus that causes the disease COVID-19, is related to SARS-CoV, MERS-CoV, and other betacoronaviruses (HKU1, NL63, OC43 and 229E). SARS-CoV-2 is an enveloped positive strand RNA virus that consists of several structural proteins including spike (S) protein, envelope (E) protein, membrane (M) protein and nucleocapsid (N) protein; and other non-structural proteins (NSPs). Spike proteins located on the surface of the virus, have a high affinity for binding to human receptor ACE2 (angiotensin-converting enzyme 2) within respiratory epithelial which serves as an entry mechanism for infection. As such, the S protein may be vital to blocking viral infection and vaccine development. Anti-SARS-CoV-2 Spike Protein Antibody is useful for researchers interested in diagnostics, vaccines, and viral research.
Synonyms:	rabbit anti-SARS CoV 2 Spike Protein Antibody, Spike glycoprotein antibody, SARS CoV2 antibody, 2019-nCoV, COVID-19, S glycoprotein, Severe acute respiratory syndrome antibody, Severe acute respiratory syndrome coronavirus 2 (2019-nCoV) (SARS-CoV-2), BAC conjugated SARS CoV-2 Spike Protein
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	SARS-CoV-2
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Immunogen Type:	Recombinant Protein
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a purified SARS-CoV-2 S protein with His-tag, derived from the transfected human HEK293 cells.
Purity/Specificity:	Anti-SARS-CoV-2 Spike antibody is directed against SARS Coronavirus 2 Spike protein. The product was purified from monospecific antiserum by immunoaffinity chromatography. BLAST analysis was used to suggest reactivity with related Coronavirus proteins. Cross reactivity with homologues from other sources has not been determined.
Relevant Links:	• NCBI - QHD43416.1 • NCBI - MN908947.3 • UniProtKB - P0DTC2

Application Details

Tested Applications:	ELISA
Application Note:	Anti-SARS-CoV-2 Whole Spike protein antibody has been tested for use in ELISA and shows reactivity to SARS COV-2 Whole Spike. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:335,000 - 1:435,000
WB:	User Optimized

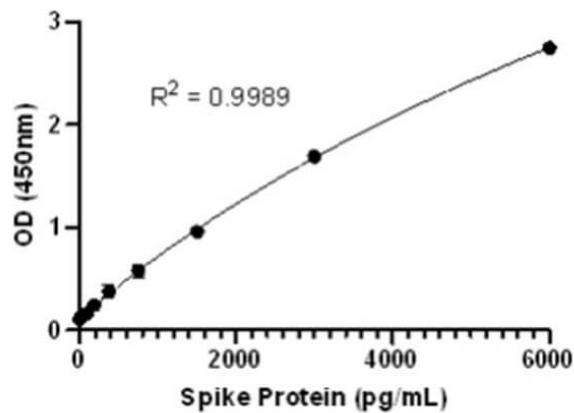
Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

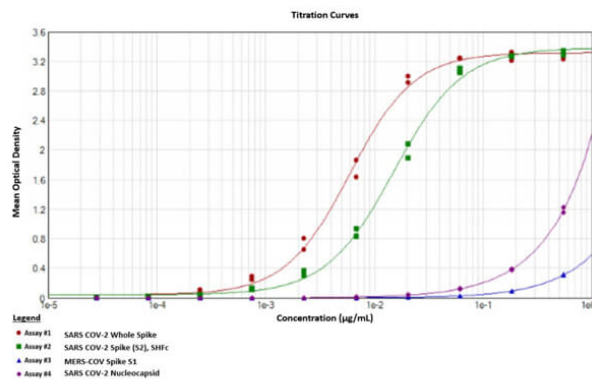
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



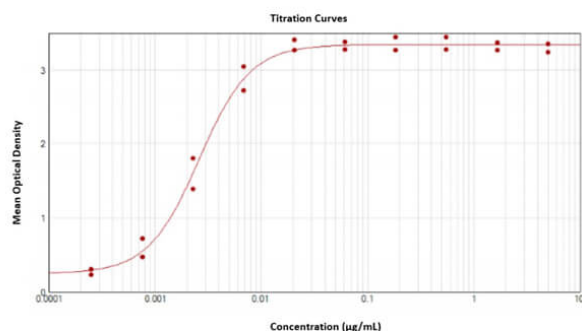
ELISA

Sandwich ELISA Report for the detection of SARS-CoV-2 Spike Protein. Capture Antibody: Anti-SARS-CoV-2 Whole Spike Protein (RABBIT) Antibody (p/n 600-401-MS9) [4 µg/mL]. Detection Antibody: Anti-SARS-CoV-2 Whole Spike Protein (RABBIT) Antibody Biotin Conjugated (p/n 600-406-MS9) [0.6 µg/mL]. Reporter: Streptavidin Peroxidase Conjugated (p/n S000-03) [1:10,000]. SARS-CoV-2 was serially diluted from 6000 pg/mL to 5.8 pg/mL. Analysis confirms sensitivity to 11.7 pg/mL.



ELISA

ELISA results of Rabbit Anti-SARS CoV-2 Whole Spike Protein. Each well was coated in duplicate with 0.5µg of rec SARS CoV-2 whole spike protein [RED line], rec SARS CoV-2 spike (S2), SHFc [GREEN line], rec MERS Spike S1 protein [BLUE line], and rec SARS CoV-2 N protein [PURPLE line]. The working dilution for SARS-CoV-2 whole spike is 1:168,000 and SARS CoV-2 spike S2, SHFc is 1:66,400. The starting dilution of antibody was 0.55µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. SARS-CoV-2 whole spike EC50: 6ng/mL and SARS CoV-2 spike S2 EC50: 15ng/mL.



ELISA

ELISA Results of Rabbit Anti-SARS CoV-2 Whole Spike Protein Biotin Conjugated. Each well was coated in duplicate with 10 µg/mL of SARS CoV-2 Whole Spike Protein [Red Line]. The working dilution is 1:384,000. The starting dilution of antibody was 5 µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 1% Fish Gel/PBS (p/n MB-066), HRP Stabilizer (p/n MB-076), Streptavidin-HRP conjugated (p/n S000-03) at 1:10,000, and TMB substrate (p/n TMBE-1000).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.