

Datasheet for 200-301-MU5**SARS-CoV-2 Beta Variant Spike Protein Antibody****Overview**

Description:	Anti-SARS-CoV-2 Beta Variant Spike Protein (MOUSE) Antibody - 200-301-MU5
Item No.:	200-301-MU5
Size:	100 µg
Applications:	ELISA
Reactivity:	SARS-CoV-2
Host Species:	Mouse Balb/c

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 Beta Variant Spike Protein Antibody is useful for researchers interested in diagnostics, vaccines, and viral research.
Synonyms:	mouse anti-SARS CoV 2 Spike Protein (Beta Variant) 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)
Host Species:	Mouse Balb/c
Clonality:	Monoclonal
Clone ID:	25D10.E3.F9
Format:	IgG

Target Details

Reactivity:	SARS-CoV-2
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Immunogen Type:	Conjugated Peptide
Immunogen:	This protein A purified antibody was produced by repeated immunizations in mice with a synthetic peptide from an internal region of the SARS-CoV-2 Spike protein.
Purity/Specificity:	SARS-CoV-2 Beta Variant Spike Protein Antibody is directed against SARS Coronavirus 2 Spike (S2) Beta B.1.351 Variant Protein. The product was purified from roller bottle culture by protein A chromatography. BLAST analysis was used to suggest reactivity with related Coronavirus proteins. No reactivity was seen against B.1.429/CAL.20, B.1.526, B.1.1.7, B.1.617.2, P.1, or B.1.525. Cross reactivity with homologues from other sources has not been determined.
Relevant Links:	• UniProtKB - P0DTC2 • NCBI - QHD43416.1

Application Details

Tested Applications:	ELISA
Application Note:	Anti-SARS-CoV-2 Beta Variant Spike Protein Antibody has been tested for use in ELISA and shows reactivity to SARS Coronavirus 2 Spike (S2) Beta Variant Protein. 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:	User Optimized
WB:	User Optimized

Formulation

Physical State:	Liquid (sterile filtered)
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:	None

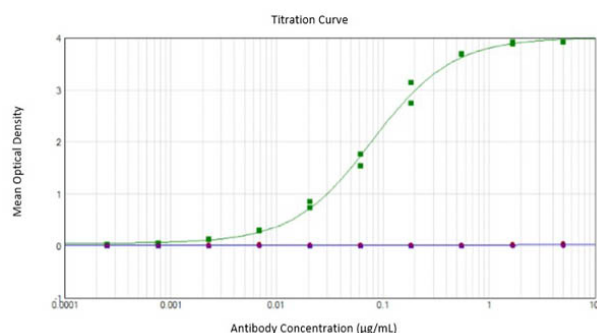
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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

ELISA results of Mouse Anti-SARS CoV-2 Beta B.1.351 Variant Spike Protein Antibody. Each well was coated in duplicate with 10µg/mL of SARS CoV-2 Beta (B.1.351 variant) [GREEN line], SARS CoV-2 (B.1.1.7 variant) [RED line], SARS CoV-2 (P.1 variant) [BLUE line], SARS CoV-2 (B.1.525 variant) [PURPLE line]. Additional assays were run against peptides representing other SARS CoV-2 variants (B.1.429/CAL.20, B.1.526, B.1.1.7, B.1.617.2) with similar negative results. 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 Rabbit Anti-Mouse IgG HRP conjugated (p/n 610-403-C46) at 1:8000 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.