

Product Datasheet

SARS-CoV-2 Spike Antibody (7A4D12) - Alpha Variant, B.1.1.7, UK - BSA Free NBP3-12854

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Publications: 1

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP3-12854

Updated 9/9/2025 v.20.1

Earn rewards for product
reviews and publications.

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/NBP3-12854



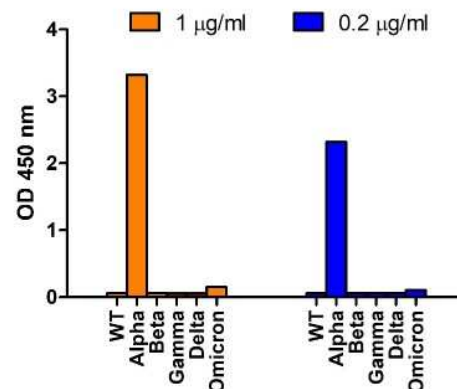
NBP3-12854

SARS-CoV-2 Spike Antibody (7A4D12) - Alpha Variant, B.1.1.7, UK - BSA Free

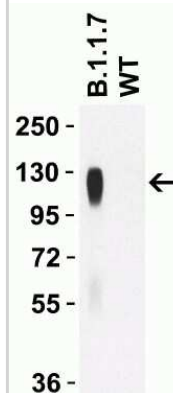
Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	7A4D12
Preservative	0.02% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein A purified
Buffer	PBS
Product Description	
Description	Novus Biologicals Mouse SARS-CoV-2 Spike Antibody (7A4D12) - Alpha Variant, B.1.1.7, UK - BSA Free (NBP3-12854) is a monoclonal antibody validated for use in WB and ELISA. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	43740568
Gene Symbol	S
Species	SARS-CoV-2
Specificity/Sensitivity	May cross-react with several virus of interest (VOI) variant lineages that contains P681H mutation, including B.11.318, B.1.621, B.1.621.1, P.3. But all of these lineages are rarely present in current pandemic.
Immunogen	Anti-SARS-CoV-2 (COVID-19) P681H Mutant Specific Spike antibody was raised against a peptide corresponding to 12 amino acids near the center of SARS-CoV-2 Alpha variant (B.1.1.7) Spike protein. The immunogen is located within 650-700 amino acids of SARS-CoV-2 Alpha Variant (B.1.1.7, UK) Spike protein.
Product Application Details	
Applications	Western Blot, ELISA
Recommended Dilutions	Western Blot 1 ug/mL, ELISA
Application Notes	Antibody validated: Western Blot in human samples. Anti-SARS-CoV-2 (COVID-19) P681H Mutant Specific Spike antibody can specifically detect SARS-CoV-2 Alpha Variant (B.1.1.7, UK) S1 protein, but not SARS-CoV-2 WT Spike S1 protein by ELISA and WB. It can also detect mutant peptide (681H), but not WT peptide (681P). All other applications and species not yet tested.

Images

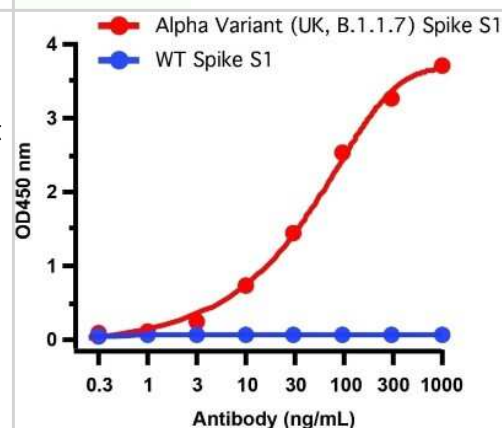
ELISA: SARS-CoV-2 Spike Antibody (7A4D12) - Alpha Variant, B.1.1.7, UK [NBP3-12854] - ELISA Validation of Alpha Variant Spike Antibodies with Spike S1 Protein of SARS-CoV-2 Variants. Coating Antigen: SARS-CoV-2 spike S1 proteins WT, alpha variant (B.1.1.7), beta variant (B.1.351), gamma variant (P.1), delta variant (B.1.617.2), and omicron variant (B.1.1.529), 1 $\mu\text{g}/\text{mL}$, incubate at 4 C overnight. Detection Antibodies: SARS-CoV-2 Alpha Variant Spike antibody, NBP3-12854, dilution: 200-1000 ng/mL, incubate at RT for 1 hr. Secondary Antibodies: Goat anti-mouse HRP at 1:5,000, incubate at RT for 1 hr. SARS-CoV-2 alpha variant spike antibody (NBP3-12854) can specifically detect alpha variant spike S1 protein, but not spike S1 protein of WT and other tested variants by ELISA.



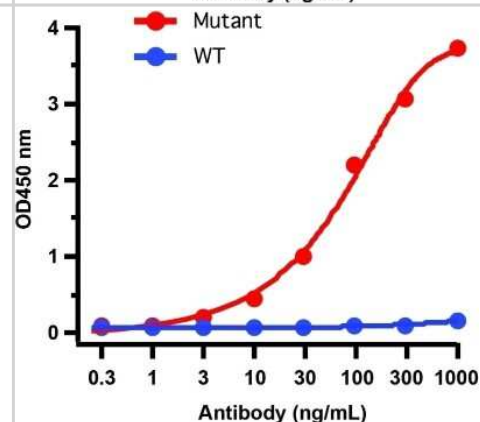
Western Blot: SARS-CoV-2 Spike Antibody (7A4D12) - Alpha Variant, B.1.1.7, UK [NBP3-12854] - WB Validation of P681H Mutant Specific Spike Antibodies with SARS-CoV-2 Alpha Variant Spike S1 Protein. Loading: 50 ng of SARS-CoV-2 spike S1 proteins, including WT and alpha variant (B.1.1.7, UK). Detection Antibodies: SARS-CoV-2 P681H Mutant Specific Spike antibody, NBP3-12854, 1 $\mu\text{g}/\text{mL}$, incubate at RT for 1 hr. Secondary Antibodies: Goat anti-mouse HRP at 1:5,000, incubate at RT for 1 hr. SARS-CoV-2 P681H Mutant Specific Spike antibody (NBP3-12854) can specifically detect alpha variant spike S1 protein, but not WT spike S1 protein by WB.



ELISA: SARS-CoV-2 Spike Antibody (7A4D12) - Alpha Variant, B.1.1.7, UK [NBP3-12854] - ELISA Validation of P681H Mutant Specific Spike Antibodies with SARS-CoV-2 Alpha Variant Spike S1 Protein. Coating Antigen: SARS-CoV-2 spike S1 proteins, including WT and alpha variant (B.1.1.7, UK), 1 $\mu\text{g}/\text{mL}$, incubate at 4 C overnight. Detection Antibodies: SARS-CoV-2 Alpha Variant Spike antibody, NBP3-12854, dilution: 0.3-1000 ng/mL, incubate at RT for 1 hr. Secondary Antibodies: Goat anti-mouse HRP at 1:5,000, incubate at RT for 1 hr. SARS-CoV-2 P681H Mutant Specific Spike antibody (NBP3-12854) can specifically detect alpha variant spike S1 protein, but not WT spike S1 protein by ELISA.



ELISA: SARS-CoV-2 Spike Antibody (7A4D12) - Alpha Variant, B.1.1.7, UK [NBP3-12854] - ELISA Validation of P681H Mutant Specific Spike Antibodies with Mutant and WT Peptide. Coating Antigen: SARS-CoV-2 spike S1 peptides, including WT and alpha variant (B.1.1.7, UK), 1 $\mu\text{g}/\text{mL}$, incubate at 4 C overnight. Detection Antibodies: SARS-CoV-2 P681H Mutant Specific Spike antibody, NBP3-12854, dilution: 0.1-1000 ng/mL, incubate at RT for 1 hr. Secondary Antibodies: Goat anti-mouse HRP at 1:5,000, incubate at RT for 1 hr. SARS-CoV-2 P681H Mutant Specific Spike antibody (NBP3-12854) can specifically detect alpha variant spike S1 peptide (681H), but not WT peptide (681P).



Publications

Yang L, Yarovinsky T, Pham K et al. Immunization with virus-like vesicle-based COVID-19 vaccine induces robust systemic and mucosal immunity NPJ vaccines 2025-09-29 [PMID: 41022870]



Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NBP3-12854

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP3-12854

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications

