

Product Datasheet

CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus NBP2-36440

Unit Size: 0.1 ml

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

www.novusbio.com



technical@novusbio.com

Reviews: 6 Publications: 6

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP2-36440

Updated 1/22/2018 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/NBP2-36440

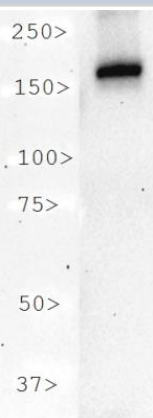


NBP2-36440**CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus**

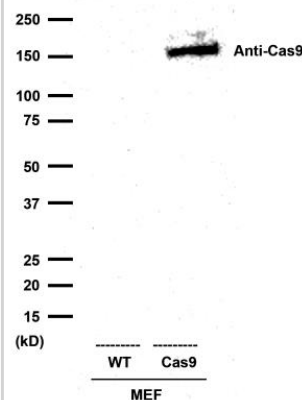
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	7A9-3A3
Preservative	0.02% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Product Description	
Host	Mouse
Species	Bacteria
Specificity/Sensitivity	Cas9 protein from Streptococcus pyogenes serotype M1.
Immunogen	Recombinant Cas9 within the N-terminal region of Streptococcus pyogenes. [UniProt# Q99ZW2]
Product Application Details	
Applications	Western Blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation, Immunohistochemistry Whole-Mount
Recommended Dilutions	Western Blot 1:1000, Immunohistochemistry, Immunocytochemistry/Immunofluorescence 1:500, Immunoprecipitation, Immunohistochemistry-Frozen, Immunohistochemistry Whole-Mount
Application Notes	IHC use of CRISPR-Cas9 antibody (clone 7A9-3A3) on 4% formaldehyde fixed and 20um thick frozen-/cryo-sections has been cited by El Fatimy et al 2017 in PMID: 28153089.

Images

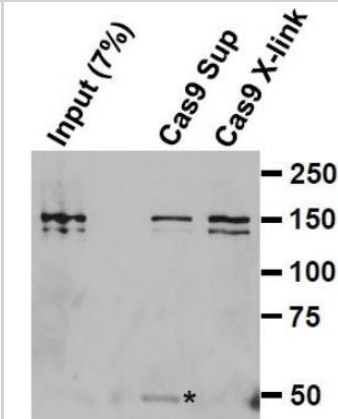
Western Blot: CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus [NBP2-36440] - WB analysis of lysate from Cas9 transfected HEK-293T cells using Cas9 antibody clone 7A9-3A3 at 2ug/ml concentration. The signal was developed using HRP-labelled anti-mouse secondary antibody and ECL based detection.



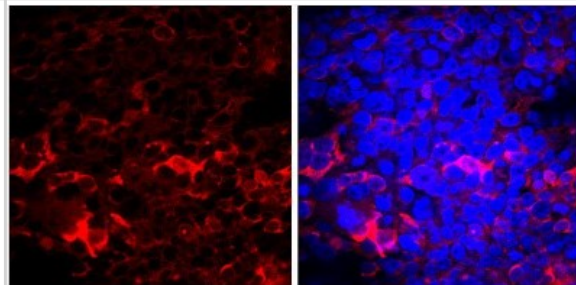
Western Blot: CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus [NBP2-36440] - Western blots of 20 ug whole cell lysates from control MEF (MEF-WT) and MEF-Cas9 stable cell line. CRISPR-Cas9 antibody (clone 7A9-3A3) was used at 1:1000 dilution. Image submitted via verified customer review.



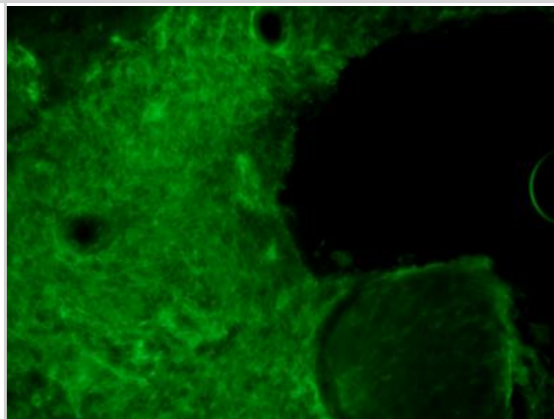
Immunoprecipitation: CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus [NBP2-36440] - Cas9 Antibody (7A9-3A3) [NBP2-36440] - HEK293T expressing N-terminally Flag-tagged *S.pyogenes* Cas9 were lysed 72h post transfection by resuspending the cells in Hunt buffer and subjected to 3 freeze-thaw cycles in liquid nitrogen/ice. Proteins were immunoprecipitated from 100ug of whole cell lysate for 1h at 4C with Cas9 supernatant followed by incubation for 1h at 4C with a 1:1 mixture of protein A/G sepharose beads, or for 2h at 4C with Cas9 ab crosslinked to a 1:1 mixture of protein A/G sepharose beads. Beads were washed 2x with Hunt buffer and 1x with TBS. Bound proteins were eluted by boiling in Laemmli, separated by SDS-PAGE and transferred to nitrocellulose. Membrane was blocked, incubated with Cas9 ab, incubated with HRP anti-mouse secondary. *IgG heavy chain



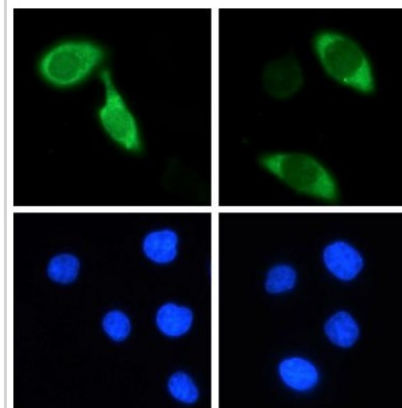
Immunocytochemistry/Immunofluorescence: CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus [NBP2-36440] - ICC/IF analysis of Crispr-Cas9 transfected HEK293 cells using CRISPR-Cas9 antibody (clone 7A9-3A3). Red staining represents CRISPR-Cas9 positivity while DAPI stained nuclei are visible in blue color. This image is from a verified end user and was submitted via a product review.



Immunohistochemistry-Frozen: CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus [NBP2-36440] - IHC analysis of a formalin fixed 20um thick frozen section of mouse brain with GBM xenograft tumor areas (GBM cells over expressing SpyCas9 through lentivirus infection). CRISPR-Cas9 antibody (clone 7A9-3A3) was used at 1:50 dilution. The signal was detected using immunofluorescence labeled secondary antibody via Confocal microscopy. This image was submitted through a verified customer review.



Immunocytochemistry/Immunofluorescence: CRISPR-Cas9 Antibody (7A9-3A3) - N-Terminus [NBP2-36440] - HeLa cells were transiently transfected with an N-terminally Flag-tagged *S. pyogenes* Cas9 expression vector. The cells were stained with the Cas9 antibody followed by anti mouse-AF488 coupled secondary antibody. Nuclei were counter-stained with Hoechst 33342.



Publications

Rogers ZN, McFarland CD, Winters IP. A quantitative and multiplexed approach to uncover the fitness landscape of tumor suppression in vivo. *Nat Methods*. [PMID: 28530655]

Chew WL, Tabebordbar M, Cheng JK et al. A multifunctional AAV-CRISPR-Cas9 and its host response. *Nat Methods*. [PMID: 27595405]

EI Fatimy R, Subramanian S, Uhlmann EJ, Krichevsky AM. Genome Editing Reveals Glioblastoma Addiction to MicroRNA-10b. *Mol Ther*. 2017 Feb 1 [PMID: 28153089] (WB, ICC/IF, IHC-Fr)

Details:

CRISPR-Cas9 antibody (clone 7A9-3A3) was used for WB analysis of lysates from human/mouse primary astrocytes and neurons which were subjected to transductions with miR-10b-editing lentivirus at the MOI levels that led to similar levels of Cas9 expression. WB was also performed on lysates of established orthotopic LN229 glioblastoma/GBM tumors which were subjected to intratumoral Injections of 105 TU of Lentiviral miR-10b-Editing Vectors. The antibody was also used in ICC/IF assay to determine the lentivirus functional titer (through serial dilutions) in LN229 cells, and for IHC on cryo/frozen sections of brain tumor which were left uninfected or were infected with sgRNA G1. IHC was performed on intracranial tumors which were fixed using 4% formaldehyde and were cryo-sectioned to a 20-um-thickness before processing for staining.

Choi JG, Dang Y, Abraham S et al. Lentivirus pre-packed with Cas9 protein for safer gene editing. *Gene Ther*. 2016 Apr 07 [PMID: 27052803] (ICC/IF)

Chiou SH, Winters IP, Wang J et al. Pancreatic cancer modeling using retrograde viral vector delivery and in vivo CRISPR/Cas9-mediated somatic genome editing. *Genes Dev* 2015 Jul 15 [PMID: 26178787] (WB)

Chu VT, Weber T, Graf R et al. Efficient generation of Rosa26 knock-in mice using CRISPR/Cas9 in C57BL/6 zygotes. *BMC Biotechnol*. 2016 Jan 16 [PMID: 26772810] (WB)

Details:

CRISPR/Cas9 antibody used for WB on lysates from TAT-Cre/LPS treated naive B cells of three Rosa26LSL-Cas9 F1 mice (Figure 3D).



Novus Biologicals USA

8100 Southpark Way, A-8
Littleton, CO 80120
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
novus@novusbio.com

Novus Biologicals Canada

461 North Service Road West, Unit B37
Oakville, ON L6M 2V5
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada@novusbio.com

Novus Biologicals Europe

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@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: technical@novusbio.com
Orders: orders@novusbio.com
General: novus@novusbio.com

Products Related to NBP2-36440

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Light Chain Isotype Control (P3.6.2.8.1)
NBP2-36440AF488	CRISPR-Cas9 Antibody (7A9-3A3) [Alexa Fluor® 488]

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/NBP2-36440

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

