CRISPR-Cas9 monoclonal antibody

Catalog # MAB15818 Size 50 ug

Applications



Western Blot (Cell lysate)

Western Blot (Cell lysate) analysis of (1) HeLa cells transfected with a flagtagged Cas9, (2) 10 ng of recombinant Cas9 protein, and (3) 1 ng of recombinant Cas9 protein.



Immunofluorescence

Immunofluorescent staining of Hela cell line with antibody followed by incubation with an anti mouse secondary antibody (left). Nuclei were counter-stained with DAPI (right).



Immunoprecipitation

IP was performed on whole cell extracts (100 ug) from HEK293 cells transfected with a Flag-tagged Cas9.

The immunoprecipitated proteins were subsequently analysed by Western Blot with the antibody. Lane 3 and 4 show the result of the IP; a negative IP control (IP on untransfected cells) and the input (15 ug) are shown in lane 2 and 1, respectively.

Specification

Product Description

Mouse monoclonal antibody raised against recombinant CRISPR-Cas9.

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Product Information

Immunogen	Recombinant protein corresponding to N-terminus of the Cas9 nuclease (CRISPR-associated protei n 9).
Host	Mouse
Reactivity	Streptococcus pyogenes
Form	Liquid
Purification	Protein A purification
lsotype	lgG1, kappa
Recommend Usage	Western Blot (1:1000-1:6000) Immunoprecipitation (1:200) Immunofluorescence (1:100-500) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.02% sodium azide).
Storage Instruction	Store at -20°C. For long term storage store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Gene Info — SPy_104	6
Entrez GenelD	<u>901176</u>

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Product Information

Protein Accession#	<u>Q99ZW2</u>
Gene Name	SPy_1046
Gene Alias	-
Gene Description	hypothetical protein
Gene Ontology	<u>Hyperlink</u>
Other Designations	-

Publication Reference

 <u>Noncoding somatic and inherited single-nucleotide variants converge to promote ESR1 expression in breast</u> cancer.

Bailey SD, Desai K, Kron KJ, Mazrooei P, Sinnott-Armstrong NA, Treloar AE, Dowar M, Thu KL, Cescon DW, Silvester J, Yang SY, Wu X, Pezo RC, Haibe-Kains B, Mak TW, Bedard PL, Pugh TJ, Sallari RC, Lupien M. Nature Genetics 2016 Oct; 48(10):1260.

Application: WB-Tr, Human, T-47D cells

• The Development of a Viral Mediated CRISPR/Cas9 System with Doxycycline Dependent gRNA Expression for Inducible In vitro and In vivo Genome Editing.

Christopher A. de Solis, Anthony Ho, Roopashri Holehonnur, Jonathan E. Ploski.

Frontiers in Molecular Neuroscience 2016 Aug; 9:70.

Application: IF, Human, HEK 293FT cells

Crispr-mediated Gene Targeting of Human Induced Pluripotent Stem Cells.

Byrne SM, Church GM.

Current Protocols in Stem Cell Biology 2015 Nov; 35:5A.8.1.

Application: IF, Human, Human induced pluripotent stem cells

<u>A Geminivirus-Based Guide RNA Delivery System for CRISPR/Cas9 Mediated Plant Genome Editing.</u>

Kangquan Yin, Ting Han, Guang Liu, Tianyuan Chen, Ying Wang, Alice Yunzi L Yu, Yule Liu. Scientific Reports 2015 Oct; 5:14926.

Application: WB-Tr, Plant, Plant cells



Product Information

• <u>A localized nucleolar DNA damage response facilitates recruitment of the homology-directed repair machinery</u> independent of cell cycle stage.

van Sluis M, McStay B.

Genes & Development 2015 Jun; 29(11):1151.

Application: IF, Human, RPE1 cells

• Rapid and highly efficient mammalian cell engineering via Cas9 protein transfection.

Liang X, Potter J, Kumar S, Zou Y, Quintanilla R, Sridharan M, Carte J, Chen W, Roark N, Ranganathan S, Ravinder N, Chesnut JD.

Journal of Biotechnology 2015 Aug; 208:44.

Application: WB-Tr, Human, Mouse, HEK 293FT, Mouse embryonic stem cells

Use of the CRISPR/Cas9 system as an intracellular defense against HIV-1 infection in human cells.

Liao HK, Gu Y, Diaz A, Marlett J, Takahashi Y, Li M, Suzuki K, Xu R, Hishida T, Chang CJ, Esteban CR, Young J, Izpisua Belmonte JC.

Nature Communications 2015 Mar; 6:6413.

Application: WB-Ce, Human, Human pluripotent stem cells

• Genome-wide CRISPR screen in a mouse model of tumor growth and metastasis.

Chen S, Sanjana NE, Zheng K, Shalem O, Lee K, Shi X, Scott DA, Song J, Pan JQ, Weissleder R, Lee H, Zhang F, Sharp PA. Cell 2015 Mar; 160(6):1246.

Application: WB-Tr, Mouse, Mouse non-small cell lung cancer cells

 An inducible lentiviral guide RNA platform enables the identification of tumor-essential genes and tumorpromoting mutations in vivo.

Aubrey BJ, Kelly GL, Kueh AJ, Brennan MS, O'Connor L, Milla L, Wilcox S, Tai L, Strasser A, Herold MJ. Cell Reports 2015 Mar; 10(8):1422.

Application: WB-Tr, Human, HEK 293T cells