

## CRISPR-Cas9 Mouse monoclonal antibody

Catalog: MB9030

Host: Mouse

Reactivity: Recombinant Cas9

### BackGround:

CRISPR (clustered regularly interspaced short palindromic repeat) is an adaptive immune system that provides protection against mobile genetic elements (viruses, transposable elements and conjugative plasmids). CRISPR clusters contain spacers, sequences complementary to antecedent mobile elements, and target invading nucleic acids. CRISPR clusters are transcribed and processed into CRISPR RNA (crRNA) (Probable). In type II CRISPR systems correct processing of pre-crRNA requires a trans-encoded small RNA (tracrRNA), endogenous ribonuclease 3 (rnc) and this protein. The tracrRNA serves as a guide for ribonuclease 3-aided processing of pre-crRNA. Subsequently Cas9/crRNA/tracrRNA endonucleolytically cleaves linear or circular dsDNA target complementary to the spacer. The target strand not complementary to crRNA is first cut endonucleolytically, then trimmed by 3'-5' exonucleolytically. DNA-binding requires protein and both RNA species. Cas9 probably recognizes a short motif in the CRISPR repeat sequences (the PAM or protospacer adjacent motif) to help distinguish self versus nonself.

### Product:

Mouse IgM, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

~ 158 kDa

### Swiss-Prot:

Q99ZW2

### Purification&Purity:

Protein A affinity purified

### Applications:

WB: 1:1000-5000

ICC: 1:50-200

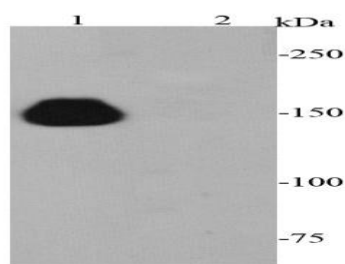
### Storage&Stability:

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

### Specificity:

This antibody detects recombinant Cas9 protein.

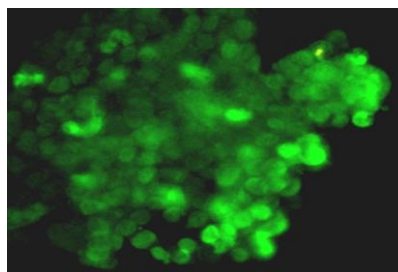
### DATA:



Western blot (WB) analysis of CRISPR/Cas9 Mouse mAb at 1:5000 dilution

Lane 1: CRISPR/Cas9 transfected 293 cells lysate

Lane 2: Non-transfected 293 cells lysate



Immunofluorescence staining CRISPR/Cas9 in CRISPR/Cas9 transfected 293T cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton \*100/PBS.

### Note:

For research use only, not for use in diagnostic procedure.

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