

Cas9 Monoclonal Antibody

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| CATALOG NO: | A1069-50 |
| ALTERNATIVE NAMES: | CRISPR-associated endonuclease associated protein 9, SpyCas9 Cas9/Csn1, CRISPR |
| AMOUNT: | 50 µg |
| IMMUNOGEN: | N-terminal fragment of <i>Streptococcus pyogenes</i> Cas9. |
| CLONE: | 7A9 |
| HOST/ISOTYPE: | Mouse IgG1k |
| SPECIFICITY: | Recognizes both Cas9 and dCas9 (nuclease deficient Cas9). |
| PURIFICATION: | Affinity purified using protein G |
| FORM: | Liquid |
| FORMULATION: | Supplied in PBS with 0.02% sodium azide. |
| STORAGE CONDITIONS: | For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| DESCRIPTION: | Cas9 (CRISPR associated protein 9) is an RNA-guided DNA endonuclease enzyme associated with the CRISPR (Clustered Regularly Interspersed Palindromic Repeats) adaptive immunity system in <i>Streptococcus pyogenes</i> and other bacteria. Cas9 is used to interrogate and cleave foreign DNA, such as invading bacteriophage DNA or plasmid DNA. This is accomplished by unwinding foreign DNA and checking for if it is complementary to the 20 base pair spacer region of the guide RNA. If the DNA substrate is complementary to the guide RNA, Cas9 cleaves the invading DNA. |
| APPLICATION: | Immunofluorescence: 1:500-1:2,000 Immunoprecipitation: 1:20 Western Blot: 1:1,000 |

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.

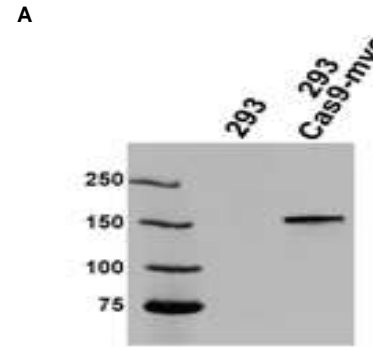


Fig. A. Western blot analysis of Cas9 in HEK293 cells transiently transfected with pMLM3613myc.

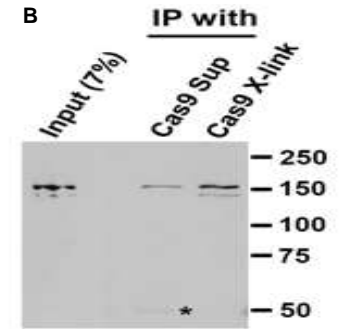


Fig. B. Immunoprecipitation of HEK293T cells expressing N-terminally Flag-tagged *S. pyogenes* Cas9 lysed 72 hours post transfection.

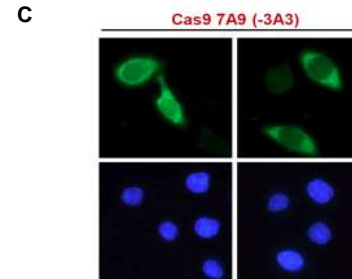


Fig. C. Immunofluorescence analysis of HeLa cells transiently transfected with an N-terminally Flag-tagged *S. pyogenes* Cas9 expression vector.

RELATED PRODUCTS

- HDAC1 Antibody (Cat. No. 3601-100)

FOR RESEARCH USE ONLY! Not to be used on humans.