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Anti-CRISPR-Cas9 Rabbit Monoclonal Antibody

Catalog # ABO14108

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	J7RUA5
Host	Rabbit
Isotype	Rabbit IgG
Clonality	Monoclonal
Format	Liquid
Description	Anti-CRISPR-Cas9 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Recombinant fragment, Staphylococcus aureus.

Additional Information

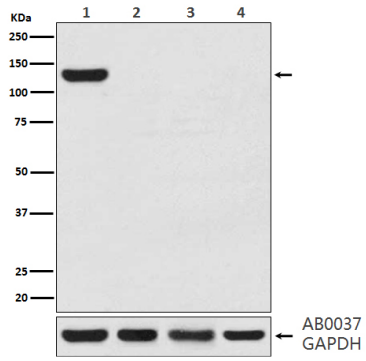
Other Names	CRISPR-associated endonuclease Cas9 {ECO:0000255|HAMAP-Rule:MF_01480}, 3.1.-.- {ECO:0000255|HAMAP-Rule:MF_01480}, SaCas9, cas9 {ECO:0000255|HAMAP-Rule:MF_01480}
Calculated MW	123949
Application Details	WB 1:1000-1:5000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:30 FC 1:50
Source	Bacteria
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ABCH-3
Immunogen	Recombinant fragment derived from Staphylococcus aureus.
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

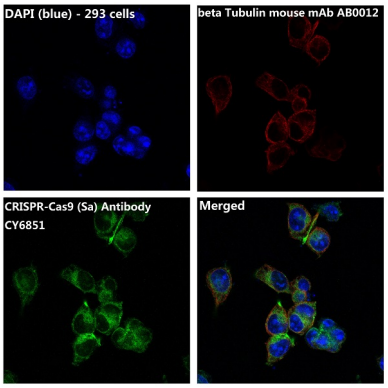
Name	cas9 {ECO:0000255|HAMAP-Rule:MF_01480}
Function	CRISPR (clustered regularly interspaced short palindromic repeat) is an

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). 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; Cas9 is inactive in the absence of the 2 guide RNAs (gRNA). Cas9 recognizes the protospacer adjacent motif (PAM) in the CRISPR repeat sequences to help distinguish self versus nonself, as targets within the bacterial CRISPR locus do not have PAMs. PAM recognition is also required for catalytic activity.

Images



Western blot analysis of CRISPR-Cas9 SA expression in (1) 293T cell lysate transfected with CRISPR-Cas9 SA; (2) 293T cell lysate; (3) 3T3 cell lysate; (4) PC12 cell lysate.



Immunofluorescent analysis of 293T cells transfected with CRISPR-Cas9 SA, using CRISPR-Cas9 SA Antibody.