Product Datasheet

CRISPR-Cas9 SP Rabbit mAb

Catalog No: #49498

Package Size: #49498-1 50ul #49498-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

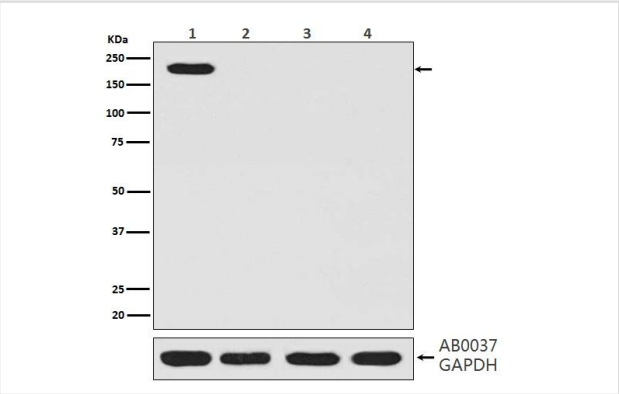
Description

Product Name	CRISPR-Cas9 SP Rabbit mAb
Clone No.	JM11-55
Purification	Affinity-chromatography
Applications	WB,IHC,ICC/IF,FC
Species Reactivity	Recombinant Cas9 Streptococcus pyogenes
Immunogen Description	Recombinant fragment derived from Streptococcus pyogenes
Other Names	Cas9 antibody CRISPR-associated endonuclease Cas9/Csn1 antibody CRISPR-Cas9/Csn1 antibody csn1 antibody SpyCas9 antibody
Accession No.	Swiss-Prot#:Q99ZW2
Uniprot	Q99ZW2
GeneID	901176;
Calculated MW	158 kDa
Concentration	0.6mg/ml
Formulation	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

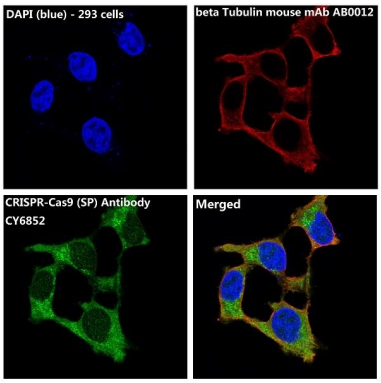
Application Details

WB 1:1000~1:5000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50

Images



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



Immunofluorescent analysis of 293T cells transfected with CRISPR-SpCas9, using CRISPR-Cas9 SP Antibody .

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.

Note: This product is for in vitro research use only