



Rabbit Anti-Streptococcus pyogenes CAS9 monoclonal antibody, clone KN22-66 (CABT-L945)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	CRISPR-Cas9 SP
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Streptococcus pyogenes
Clone	KN22-66
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC, FC
Positive Control	293 and 293T cells lysates transfected with CRISPR-Cas9.
Format	Liquid
Size	50 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

BACKGROUND

Introduction

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.

Keywords

Cas9;CRISPR-associated endonuclease Cas9/Csn1;CRISPR-Cas9/Csn1;csn1;SpyCas9 antibody

GENE INFORMATION

Entrez Gene ID

[3683](#)