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### Datasheet for ABIN5563966

## anti-CRISPR-Cas9 antibody



### Overview

Overview	
Quantity:	100 μg
Target:	CRISPR-Cas9
Reactivity:	Streptococcus pyogenes
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB)
Product Details	
Clone:	11E7-
Isotype:	lgG2a
Purification:	Affinity Purified
Target Details	
Target:	CRISPR-Cas9
Alternative Name:	Cas9
Background:	SaCas9 is a nuclease from Staphylococcus aureus that can be targeted to particular DNA
	sequences through a guide RNA that results in double-stranded breaks in DNA. Cas9 is part of
	the CRISPR/Cas9 gene-editing system that can create a DNA break at a specific location with
	the genome. 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,

#### **Target Details**

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.

Molecular Weight:

130 kDa

### **Application Details**

Application Notes:	Validated Applications: WB: 0.5 - 2 μg/mL
Restrictions:	For Research Use only

#### Handling

Format:	Liquid
Buffer:	Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C