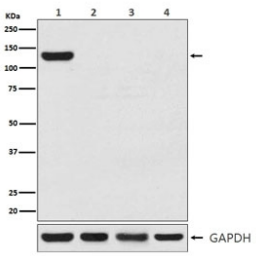
CRISPR-Cas9 Antibody [clone ABCH-3] (RQ4684)

Catalog No.	Formulation	Size
RQ4684	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Staphylococcus aureus
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ABCH-3
Purity	Affinity purified
UniProt	J7RUA5
Applications	Western Blot : 1:1000-1:5000
Limitations	This CRISPR-Cas9 antibody is available for research use only.



Western blot testing of CRISPR-Cas9 expression in 1) human 293T cell lysate transfected with CRISPR-Cas9, 2) human HEK293, 3) mouse NIH3T3 cell lysate and 4) rat PC12 cell lysate with CRISPR-Cas9 antibody.

Description

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. [UniProt]

Application Notes

Optimal dilution of the CRISPR-Cas9 antibody should be determined by the researcher.

Immunogen

A recombinant protein fragment derived from Staphylococcus aureus was used as the immunogen for the CRISPR-Cas9 antibody.

Storage

Store the CRISPR-Cas9 antibody at -20oC.