abcam

Product datasheet

HRP Anti-CRISPR-Cas9 antibody [EPR18991] ab215345

Recombinant

RabMAb

2 Images

Overview

Product name HRP Anti-CRISPR-Cas9 antibody [EPR18991]

Description HRP Rabbit monoclonal [EPR18991] to CRISPR-Cas9

Host species Rabbit
Conjugation HRP

Tested applications Suitable for: WB

Species reactivity

Predicted to work with: Streptococcus pyogenes

A

Immunogen Recombinant fragment within Streptococcus pyogenes CRISPR-Cas9 aa 800-1000. The exact

immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please

contact our Scientific Support team to discuss your requirements. (Serotype M1).

Database link: Q99ZW2

Run BLAST with
Run BLAST with

Positive control WB: HEK-293T transfected with CRISPR-Cas9 (Q99ZW2, Streptococcus pyogenes serotype

M1) with GFP-Myc tag, whole cell lysate

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

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Preservative: 0.1% Proclin 300 Solution

Constituents: 1% BSA, 30% Glycerol (glycerin, glycerine), PBS

Purity Protein A purified

ClonalityMonoclonalClone numberEPR18991

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab215345 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

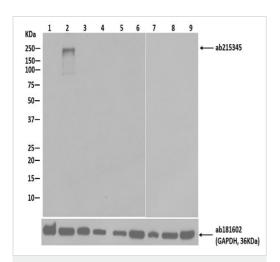
Application	Abreviews	Notes
WB		1/8000. Detects a band of approximately 158 kDa (predicted molecular weight: 158 kDa).

Target

Relevance

[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) (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.

Images



Western blot - HRP Anti-CRISPR-Cas9 antibody [EPR18991] (ab215345)

All lanes : HRP Anti-CRISPR-Cas9 antibody [EPR18991] (ab215345) at 1/8000 dilution

Lane 1 : HEK-293T (Human embryonic kidney epithelial cell) transfected with vector control (pcDNA3.1(+)-EGFP-Myc), whole cell lysate

Lane 2: HEK-293T transfected with CRISPR-Cas9 (Q99ZW2, Streptococcus pyogenes serotype M1) with GFP-Myc tag, whole cell lysate

Lane 3: HEK-293T transfected with CRISPR-Cas9 (G3ECR1, Streptococcus thermophilus, N-terminal aa1-800) with GFP-Myc tag, whole cell lysate

Lane 4: HEK-293T transfected with CRISPR-Cas9 (G3ECR1, Streptococcus thermophilus, C-terminal aa801-1409) with GFP-Myc tag, whole cell lysate

Lane 5: HEK-293T transfected vector control with GFP-Myc tag, whole cell lysate

Lane 6 : HEK-293T transfected with CRISPR-Cas9 (A1IQ68, Neisseria meningitidis serogroup A / serotype 4A (strain Z2491)) with Myc-His tag, whole cell lysate

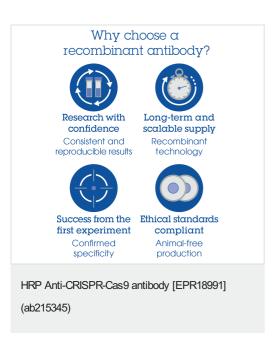
Lane 7: HEK-293T transfected with CRISPR-Cas9 (G3ECR1, Streptococcus thermophilus) with Myc-His tag, whole cell lysate

Lane 8: HEK-293T transfected with CRISPR-Cas9 (Q03JI6, Streptococcus thermophilus (strain ATCC BAA-491 / LMD-9)) with Myc-His tag, whole cell lysate

Lane 9: HEK-293T transfected with CRISPR-Cas9 (J7RUA5, Staphylococcus aureus subsp. aureus) with Myc-His tag, whole cell lysate

Predicted band size: 158 kDa Observed band size: 184 kDa

Exposure time: 3 minutes



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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