

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# CRISPR/Cas9 (R780) polyclonal antibody

Catalog: AP6037 Host: Rabbit Reactivity: Recombinant Cas9

#### **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.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### **Molecular Weight:**

~ 158,180 kDa

#### **Swiss-Prot:**

Q99ZW2

### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum

by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

#### **Applications:**

WB: 1:500~1:1000

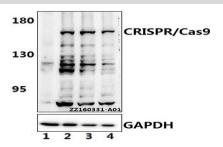
# Storage&Stability:

Store at  $4 \, \mathbb{C}$  short term. Aliquot and store at  $-20 \, \mathbb{C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

CRISPR/Cas9 (R780) polyclonal antibody detects recombinant Cas9 protein.

#### **DATA:**



Western blot (WB) analysis of CRISPR/Cas9 (R780) polyclonal anti-

body at 1:500 dilution

Lane1:HEK293T whole cell lysate.

Lane2:HEK293T transfected with CRISPR/Cas9(L:P=3:1).

Lane3:HEK293T transfected with CRISPR/Cas9(L:P=6:1).

Lane4:HEK293T transfected with CRISPR/Cas9(L:P=9:1).

#### Note:

For research use only, not for use in diagnostic procedure.

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