

# **Product Description**

Pioneering GTPase and Oncogene Product Development since 2010

#### IDH1(R132S)

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Cat. #: 26160

Gene Symbol: IDH1; IDCD; IDH; IDPC; PICD

**Description:** Anti-IDH1(R132S) Mouse Monoclonal Antibody

**Background:** Isocitrate dehydrogenases catalyze the oxidative

decarboxylation of isocitrate to 2-oxoglutarate. Mutations affecting Arg-132 are tissue-specific, and suggest that this residue plays a unique role in the development of high-grade gliomas. Mutations of Arg-132 to Cys, His, Leu or Ser abolish magnesium binding and abolish the conversion of isocitrate to alpha-ketoglutarate. Instead, alpha-ketoglutarate is converted to R-2-hydroxyglutarate. Elevated levels of R-2-hydroxyglutarate are correlated with an elevated risk of malignant brain tumors.

**Immunogen:** A synthetic peptide from the internal region of IDH1 which includes the mutation of R132S, human origin.

Applications: ELISA, WB, IF, IHC

**Recommended Dilutions:** 

ELISA: 1:1000-1:5000 WB: 1:500-1:1000

IF: 1:50-1:100 IHC: 1:50-1:100

Concentration: 1 mg/ml

Host Species: Mouse

Format: Liquid

**Clonality:** Monoclonal

Isotype: IgG

**Purity:** Purified from ascites

**Preservative:** No

**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 50%

glycerol

Species Reactivity: Recognizes IDH1(R132S) mutated protein, but not wild

type IDH1 of vertebrates.

**Storage Conditions:** Store at -20°C. Avoid repeated freezing and thawing

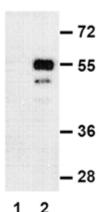


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#### **Western blot:**

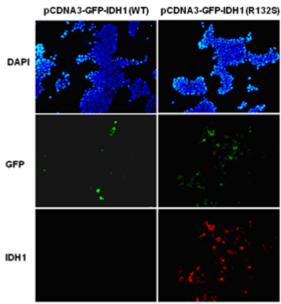
# WT R132S



WB: anti-IDH1(R132S) mAb

Western blot analysis of recombinant IDH1(R132S) and wild type proteins. Purified His-tagged IDH1(R132S) protein (lane 2) and wild type protein (lane 1) were blotted with Anti-IDH1(R132S) mouse antibody (Cat. #26160).

### Immunofluorescence:



Immunofluorescence of cells expressing IDH1 proteins with Anti-IDH1(R132S) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH1 (WT) plasmid (left column) or pCDNA3-GFP-IDH1(R132S) plasmid (right column), then fixed and stained with Anti-IDH1(R132S) monoclonal antibody (Cat. #26160).