

# Product Description

## IDH1(R132S)

**Catalog Number:** 26160

**Gene Symbol:** IDH1; IDCD; IDH; IDP; 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.

**Tested 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:** Mouse

**Clonality:** Monoclonal

**Isotype:** IgG

**Purity:** Purified from ascites

**Format:** Liquid

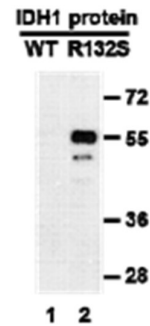
**Preservative:** No

**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH7.4, 150 mM NaCl, 50% glycerol

**Species Reactivity:** Recognizes R132S mutant, but not wild-type IDH1 of vertebrates.

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

**Western blot:**



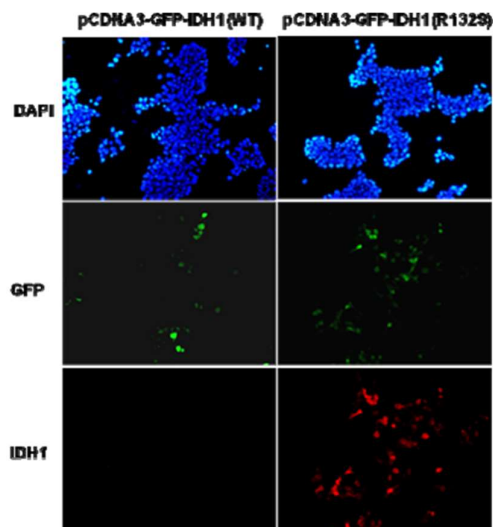
**WB: anti-IDH1(R132S) mAb**

**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).

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC APPLICATIONS

**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).

---

**FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC APPLICATIONS**