

## 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, IHC

**Recommended dilutions:**

ELISA: 1:1000-1:5000

WB: 1:500-1:1000

IHC: 1:50-1:100

**Concentration:** 1 mg/ml

**Host:** Mouse

**Clonality:** Monoclonal

**Purity:** Purified from ascites

**Format:** Liquid

**Storage buffer:**

Preservative: no

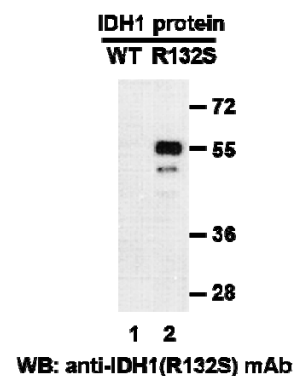
Constituents: PBS (without  $Mg^{2+}$  and  $Ca^{2+}$ ), pH 7.4, 150 mM NaCl, 50% glycerol

**Species Reactivity:** Recognizes IDH1 (R132S) mutated protein, but not wild-type IDH1 of vertebrates.

**Storage Conditions:** Store at  $-20^{\circ}C$ . Avoid

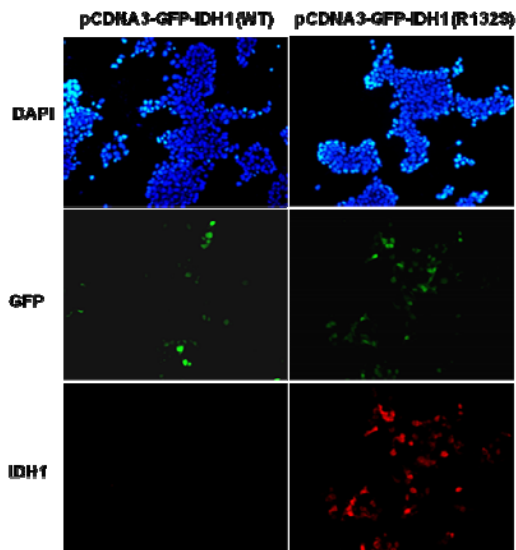
freeze / thaw cycles

**Western blot:**



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).