

IDH1(R132S)

IDH1(R132S)

Cat. #: 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.

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

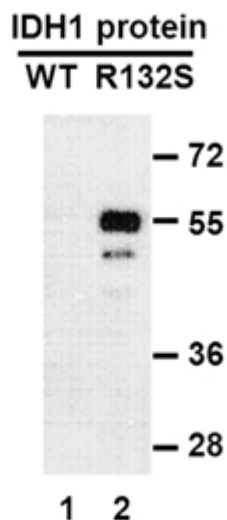
Preservative: No

Constituents: PBS (without Mg²⁺ and Ca²⁺), 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

Western blot:

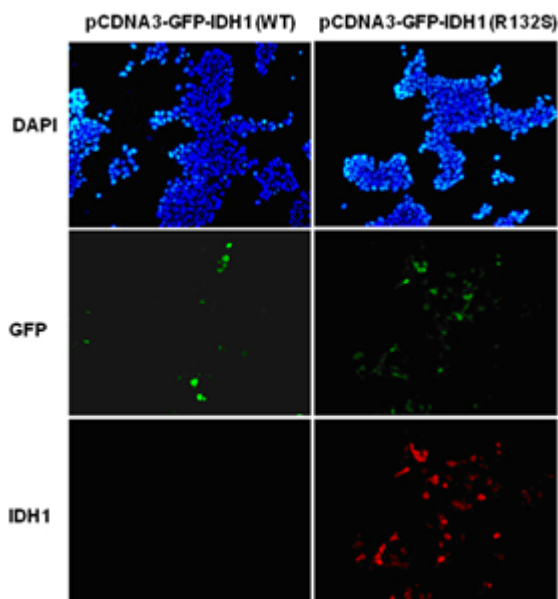


WB: anti-IDH1(R132S) mAb

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).

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).