

IDH1(R132H)

Catalog Number: 26081

Gene Symbol: IDH1(R132H)

Description: Anti-IDH1(R132H) 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 R132H, human origin.

Tested applications: ELISA, WB, IHC

Recommended dilutions:

ELISA: 1:1000-1:5000

WB: 1:100-1:1000

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 Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 50% glycerol

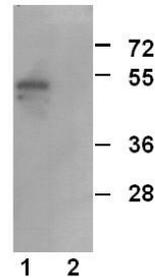
Species Reactivity: Anti-IDH1(R132H) antibody recognizes IDH1(R132H) of vertebrates.

Storage Conditions: Store at -20 °C. Avoid freeze / thaw cycles

Western blot:

IDH1 proteins

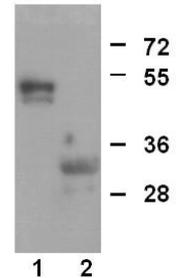
R132H WT



WB: Anti-IDH1(R132H) mAb

IDH1 proteins

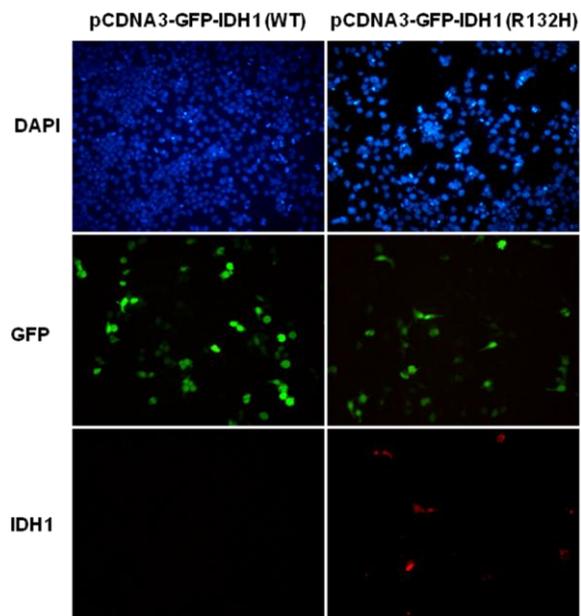
R132H WT



WB: Anti-IDH1 mAb

Western blot analysis of recombinant IDH1(R132H) and wildtype proteins. Purified His-tagged IDH1 (R132H) protein (Cat. #10199) and wild-type protein (Cat. #10198) were blotted with anti-IDH1(R132H) mouse antibody (Cat.# 26081)(Left panel). Proteins loading were blotted with anti-IDH1 mouse antibody (Cat. #26136, right panel).

Immunofluorescence:



Immunofluorescence of cells expressing IDH1 proteins with anti-IDH1(R132H) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH1 (WT) plasmid (left column) or pCDNA3-GFP-IDH1 (R132H) plasmid (right column), then fixed and stained with anti-IDH1 (R132H) monoclonal antibody (Cat. #26081).