

IDH1(R132P)

Catalog Number: 26406

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

Description: Anti-IDH1 (R132P) 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 R132P, 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

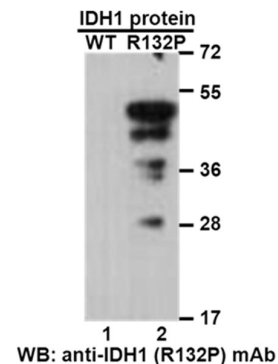
Preservative: No

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: Anti-IDH1(R132P) antibody recognizes IDH1(R132P) of vertebrates.

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

Western blot:

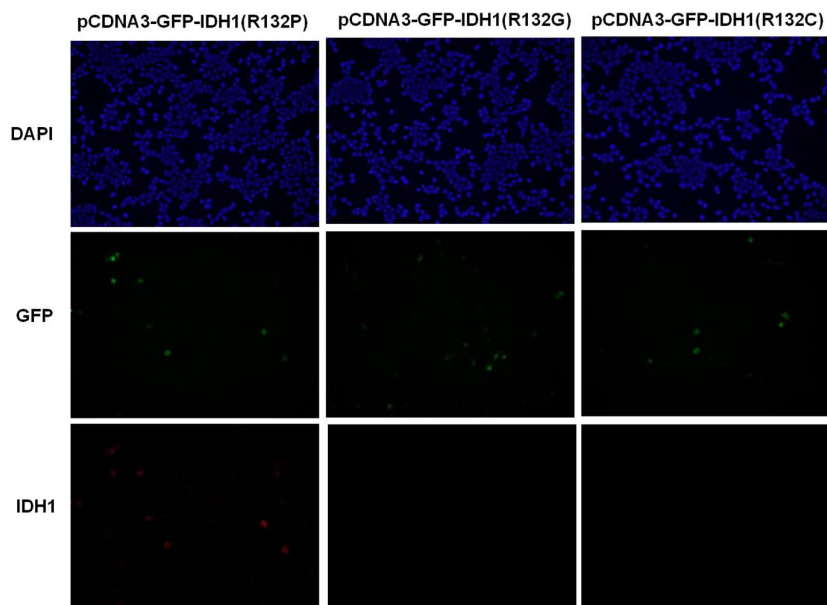
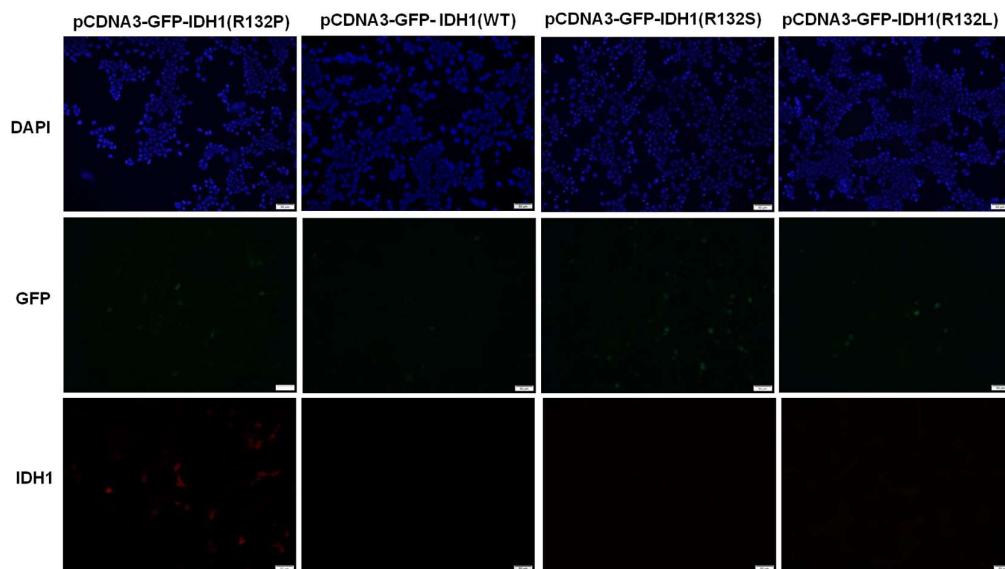


Western blot analysis of recombinant IDH1 (R132P) and wild type proteins.

Purified His-tagged IDH1 (R132P) (lane 1) and corresponding wild-type IDH1 protein (lane 2) were blotted with anti-IDH1(R132P) monoclonal antibody (Cat. # 26406).

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC APPLICATIONS

Immunofluorescence:



Immunofluorescence of cells expressing IDH1 proteins with anti-IDH1 (R132P) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH1(R132P) plasmid, pCDNA3-GFP-IDH1 (WT) plasmid, pCDNA3-GFP-IDH1(R132S) plasmid, pCDNA3-GFP-IDH1(R132L) plasmid, pCDNA3-GFP-IDH1(R132G) plasmid or pCDNA3-GFP-IDH1(R132C) plasmid, then fixed and stained with anti-IDH1 (R132P) monoclonal antibody (Cat. #26406).

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC APPLICATIONS