

IDH1 (R132P)

Catalog Number: 26406

Gene Symbol: IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH

Description: Anti-IDH1 (R132P) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenases (IDH) 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, 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:

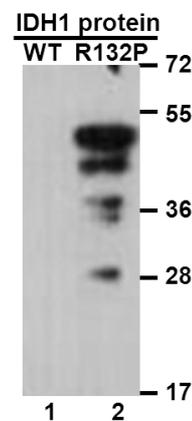
Preservative: no

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: recognizes R132P mutant, but not wild-type IDH2 of vertebrates.

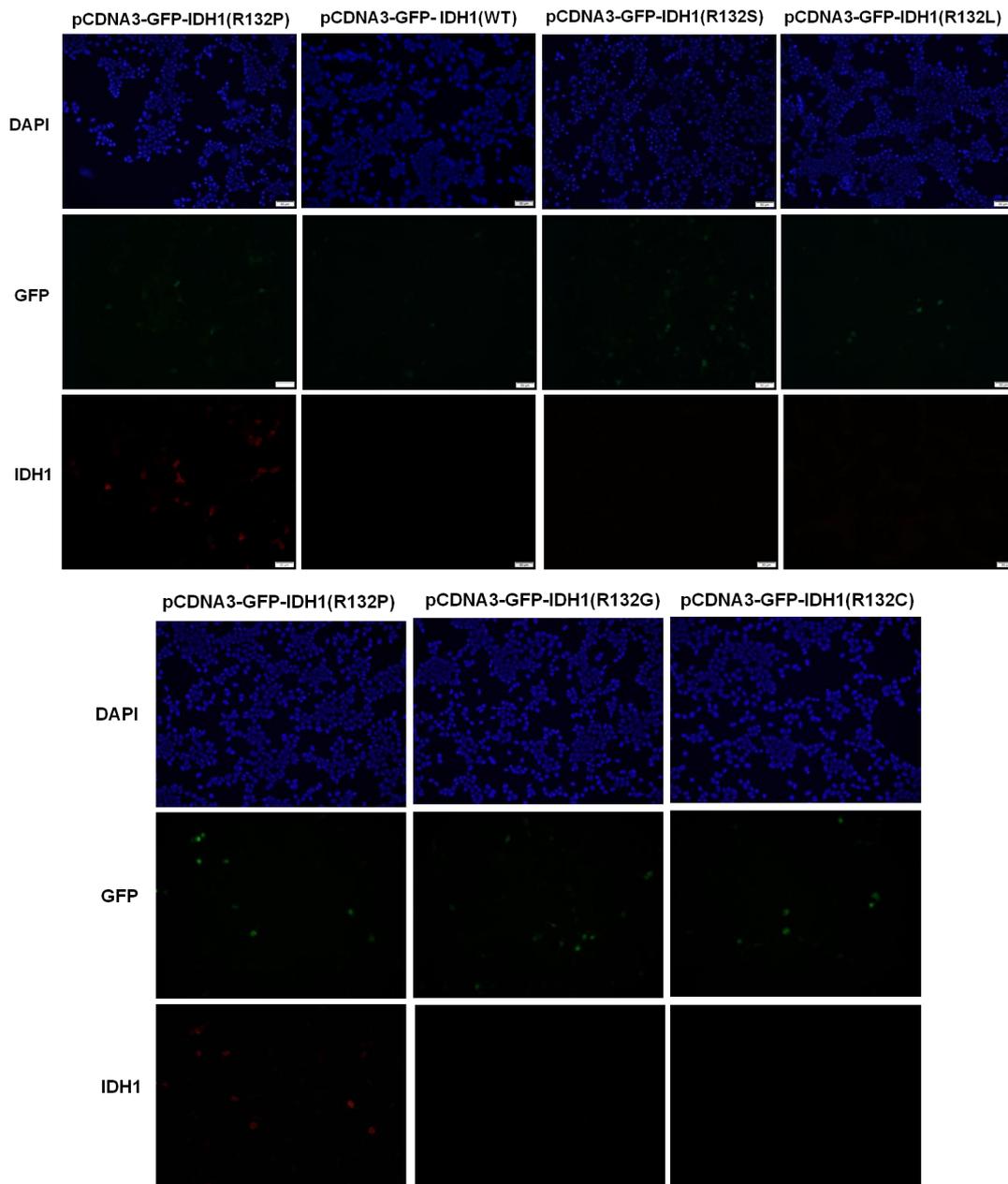
Storage Conditions: Store at -20°C. Avoid freeze / thaw cycles.

Western blot:



WB: anti-IDH1 (R132P) mAb

Western blot analysis of recombinant IDH1 (R132P) and wildtype 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).



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).