

IDH1(R132P)**IDH1(R132P)****Cat. #:** 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.**Applications:** ELISA, WB, IF, IHC**Recommended Dilutions:**

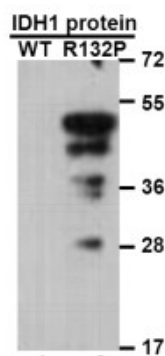
ELISA: 1:1000–1:5000

WB: 1:100–1:1000

IF: 1:50–1:100

IHC: 1:50–1:100

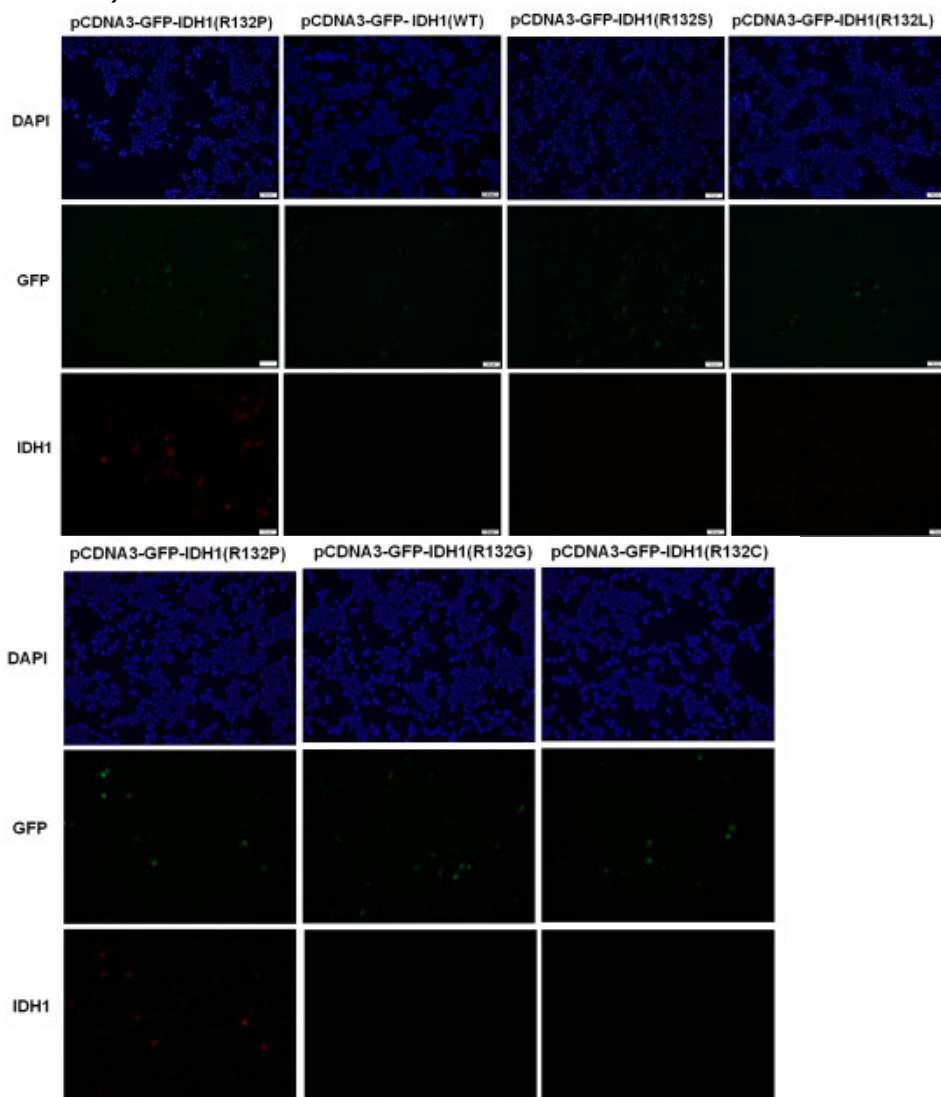
Concentration: 1 mg/ml**Host Species:** Mouse**Format:** Liquid**Clonality:** Monoclonal**Isotype:** IgG**Purity:** Purified from ascites**Preservative:** No**Constituents:** PBS (without Mg^{2+} and Ca^{2+}), pH 7.4, 150 mM NaCl, 50% glycerol**Species Reactivity:** recognizes R132P mutant, but not wild type IDH2 of vertebrates.**Storage Conditions:** Store at $-20^{\circ}C$. Avoid repeated freezing and thawing



Western blot: WB: anti-IDH1 (R132P) mAb

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).

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).

