

IDH2(R172K)**IDH2(R172K)****Cat. #:** 26163**Gene Symbol:** IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH**Description:** Anti-IDH2(R172K) Mouse Monoclonal Antibody

Background: Isocitrate dehydrogenase (IDH) catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. The isocitrate and isopropylmalate dehydrogenases family has three members, IDH1, IDH2 and IDH3. IDH2 plays a role in intermediary metabolism and energy production. Defects in IDH2 are the cause of D-2-hydroxyglutaric aciduria type 2 (D2HGA2). Somatic mosaic mutations of this protein have also been found associated to Ollier disease and Maffucci syndrome, and R172K IDH2 mutations do exist in diffusely infiltrative gliomas.

Immunogen: A synthetic peptide from the internal region of IDH2 which includes the mutation of R172K, human origin.

Applications: ELISA, WB, IHC**Recommended Dilutions:**

ELISA: 1:1000–1:5000

WB: 1:100–1:1000

IHC: 1:50–1:100

IHC: 1:10–1:100

Concentration: 1 mg/ml**Host Species:** Mouse**Format:** Liquid**Clonality:** Monoclonal**Isotype:****Purity:** Purified from ascites**Preservative:** No

Constituents: PBS (without Mg^{2+} and Ca^{2+}), pH 7.4, 150 mM NaCl, 50% glycerol

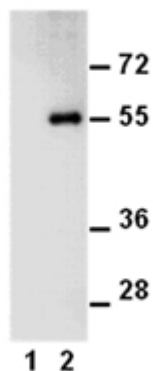
Species Reactivity: recognizes R172K mutant, but not wild type IDH2 of vertebrates.

Storage Conditions: Store at $-20^{\circ}C$. Avoid repeated freezing and thawing

Western blot:

IDH2 protein

WT R172K



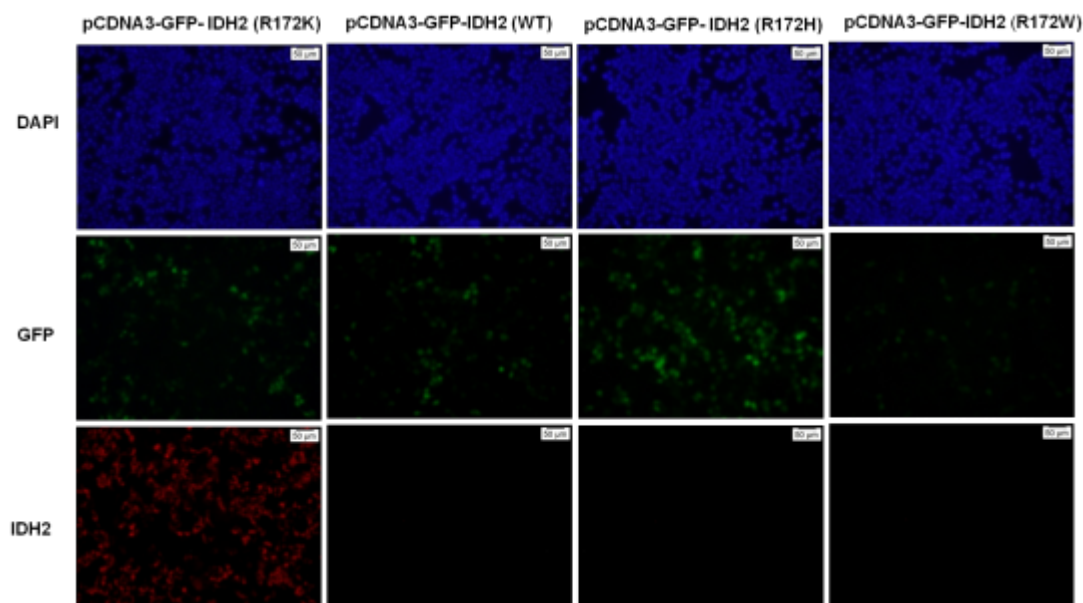
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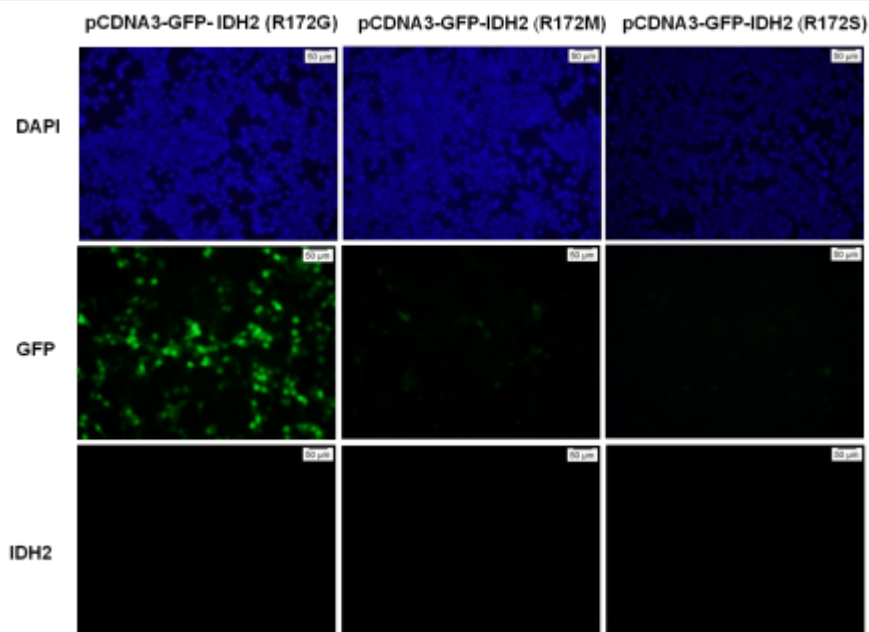
WB: anti-IDH2(R172K) mAb

Western blot analysis of recombinant IDH2(R172K) and wild type proteins.

Purified His-tagged IDH2(R172K) (lane 2) and wild type protein (lane 1) were blotted with Anti-IDH2(R172K) monoclonal antibody (Cat. #26163).

Immunofluorescence:





Immunofluorescence of cells expressing IDH2 proteins with Anti-IDH2(R172K) antibody.

HEK293T cells were transfected with pCDNA3-GFP- IDH2(R172K) plasmid , pCDNA3-GFP- IDH2 (WT) plasmid, pCDNA3-GFP- IDH2 (R172H) plasmid , pCDNA3-GFP- IDH2 (R172W) plasmid, pCDNA3-GFP- IDH2 (R172G) plasmid, pCDNA3-GFP- IDH2 (R172M) plasmid or pCDNA3-GFP- IDH2 (R172S) plasmid, then fixed and stained with anti-IDH2(R172K) monoclonal antibody (Cat. #26163).