

IDH2(R172G)**IDH2(R172G)****Cat. #:** 26231**Gene Symbol:** IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH**Description:** Anti-IDH2(R172G) 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 R172G IDH2 mutations do exist in diffusely infiltrative gliomas.

Immunogen: A synthetic peptide from the internal region of IDH2 which includes the mutation of R172G, 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

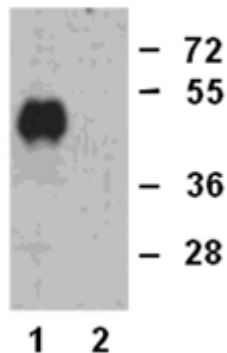
Species Reactivity: recognizes R172G mutant, but not wild type IDH2 of vertebrates.

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

Western blot:

IDH2 proteins

R172G WT

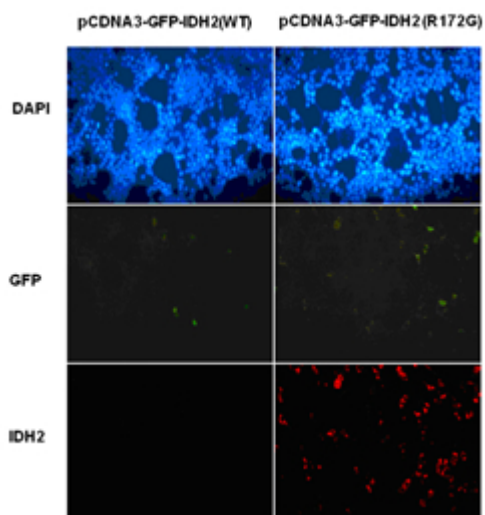


WB: Anti-IDH2(R172G) mAb

Western blot analysis of recombinant IDH2(R172G) and wild type proteins.

Purified His-tagged IDH2(R172G) (lane 1) and corresponding wild type IDH2 protein (lane 2) were blotted with Anti-IDH2(R172G) monoclonal antibody (Cat. #26231).

Immunofluorescence:



Immunofluorescence of cells expressing IDH2 proteins with Anti-IDH2(R172G) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2(R172G) plasmid (right column), then fixed and stained with Anti-IDH2(R172G) monoclonal antibody (Cat. #26231).