

**IDH2(R172S)****IDH2(R172S)****Cat. #:** 26408**Gene Symbol:** IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH**Description:** Anti-IDH2(R172S) 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 R172S IDH2 mutations do exist in diffusely infiltrative gliomas.

**Immunogen:** A synthetic peptide from the internal region of IDH2 which includes the mutation of R172S, human origin.

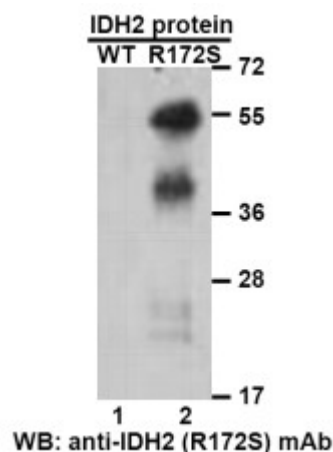
**Applications:** ELISA, WB, IF, IHC**Recommended Dilutions:**

ELISA: 1:1000–1:5000

WB: 1:100–1:1000

IF: 1:50–1:100

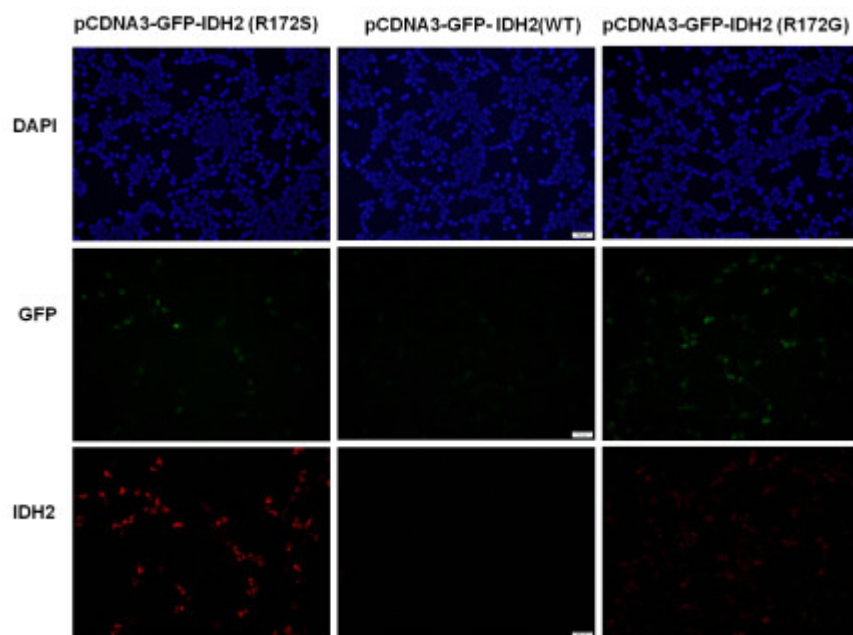
**Concentration:** 1 mg/ml**Clone ID:** 11C8B1**Host Species:** Mouse**Format:** Liquid**Clonality:** Monoclonal**Isotype:****Purity:** Purified from ascites**Preservative:** No**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 50% glycerol**Species Reactivity:** recognizes R172S mutant, but not wild type IDH2 of vertebrates.**Storage Conditions:** Store at –20°C. Avoid repeated freezing and thawing**Western blot:**

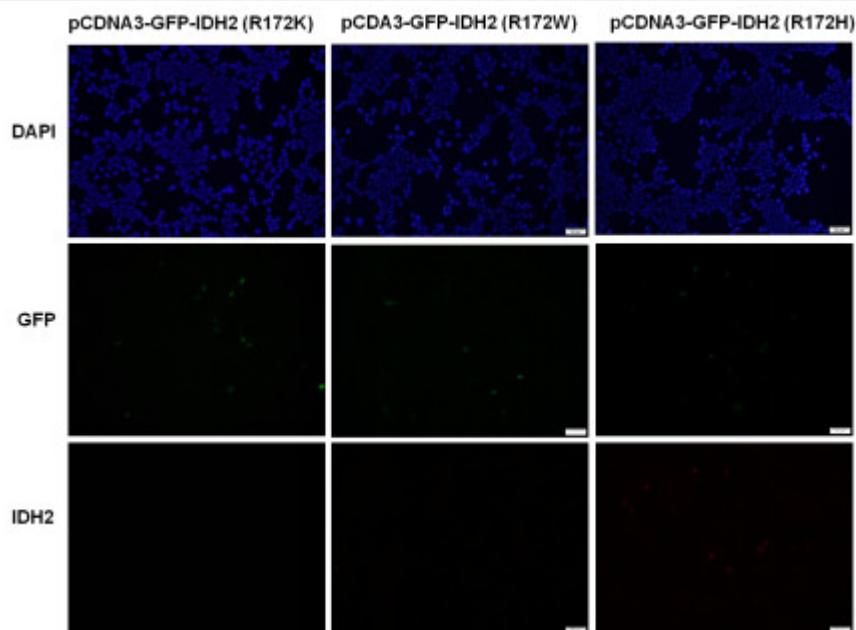


## Western blot analysis of recombinant IDH2(R172S) and wild type proteins.

Purified His-tagged IDH2(R172S) (lane 1) and corresponding wild type IDH2 protein (lane 2) were blotted with Anti-IDH2(R172S) monoclonal antibody (Cat. #26408).

## Immunofluorescence:





## Immunofluorescence of cells expressing IDH2 proteins with Anti-IDH2(R172S) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH2(R172S) plasmid, pCDNA3-GFP-IDH2 (WT) plasmid, pCDNA3-GFP-IDH2 (R172G) plasmid, pCDNA3-GFP-IDH2 (R172K) plasmid, pCDNA3-GFP-IDH2 (R172W) plasmid or pCDNA3-GFP-IDH2 (R172H) plasmid, then fixed and stained with Anti-IDH2(R172S) monoclonal antibody (Cat. #26408)