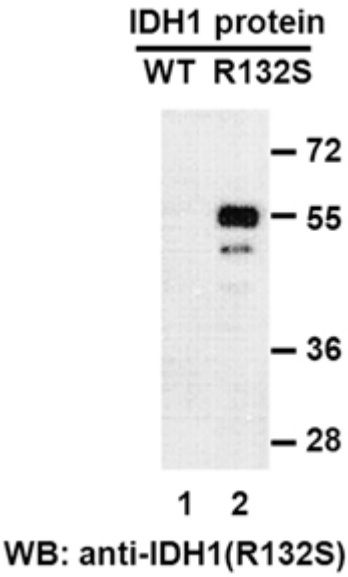
IDH1(R132S)

IDH1(R132S)

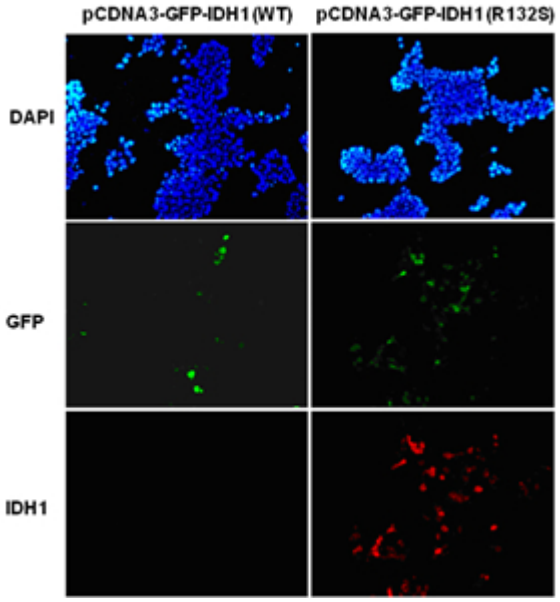
Cat. #: 26160
Gene Symbol: IDH1; IDCD; IDH; IDP; IDPC; PICD
Description: Anti-IDH1(R132S) Mouse Monoclonal Antibody
Background: Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. Mutations affecting Arg-132 are tissue-specific, and suggest that this residue 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 R132S, human origin.
Applications:ELISA, WB, IF, IHC
Recommended Dilutions:
ELISA: 1:1000-1:5000
WB: 1:500-1:1000
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 IDH1(R132S) mutated protein, but not wild type IDH1 of vertebrates.
Storage Conditions: Store at -20°C. Avoid repeated freezing and thawing

Western blot:



Western blot analysis of recombinant IDH1(R132S) and wild type proteins. Purified His-tagged IDH1(R132S) protein (lane 2) and wild type protein (lane 1) were blotted with Anti-IDH1(R132S) mouse antibody (Cat. #26160).

Immunofluorescence:



Immunofluorescence of cells expressing IDH1 proteins with Anti-IDH1(R132S) antibody.
HEK293T cells were transfected with pCDNA3-GFP-IDH1 (WT) plasmid (left column) or pCDNA3-GFP-IDH1(R132S) plasmid (right column), then fixed and stained with Anti-IDH1(R132S) monoclonal antibody (Cat. #26160).