

**IDH2(R140Q)****IDH2(R140Q)****Cat. #::** 26165**Gene Symbol:** IDH2; D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH**Description:** Anti-IDH2(R140Q) Mouse Monoclonal Antibody**Background:** Isocitrate dehydrogenase (IDH) catalyzes the oxidative decarboxylation of isocitrate to 2-oxoglutarate. Mutations of Arg-132 in IDH to Cys, His, Leu or Ser abolish magnesium binding and 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 IDH2 which includes the mutation of R140Q, human origin.**Applications:** ELISA, WB, IF, IHC**Recommended Dilutions:**

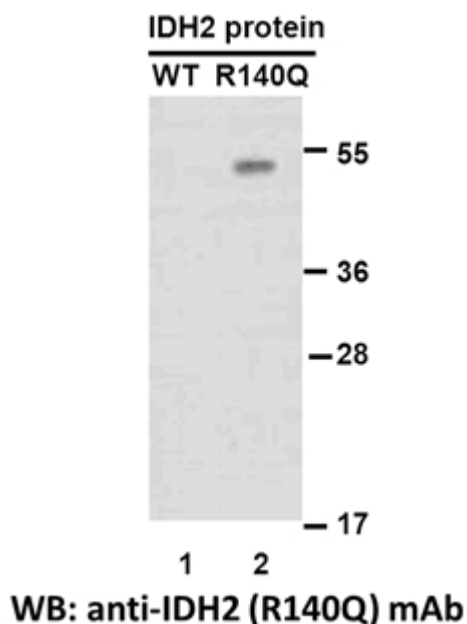
ELISA: 1:1000-1:5000

WB: 1:500-1:1000

IF: 1:50-1:100

IHC: 1:50-1:100

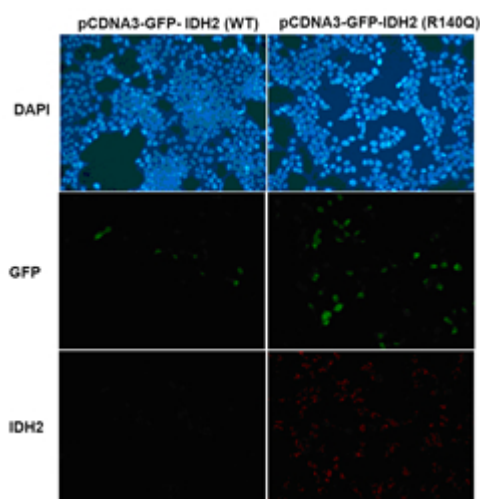
**Concentration:** 1 mg/ml**Host Species:** Mouse**Format:** Liquid**Clonality:** Monoclonal**Isotype:****Purity:** Purified from ascites**Preservative:** No**Constituents:** PBS (without  $Mg^{2+}$  and  $Ca^{2+}$ ), pH 7.4, 150 mM NaCl, 50% glycerol**Species Reactivity:** Recognizes R140Q mutant, but not wild type IDH2 of vertebrates.**Storage Conditions:** Store at  $-20^{\circ}C$ . Avoid repeated freezing and thawing**Western blot:**



## Western blot analysis of recombinant IDH2(R140Q) and wild type proteins.

Purified His-tagged IDH2(R140Q) protein (lane 2) and corresponding wild type protein (lane 1) were blotted with anti IDH2(R140Q) monoclonal antibody (Cat. #26165).

## Immunofluorescence:



## Immunofluorescence of cells expressing IDH2 proteins with anti IDH2(R140Q) antibody.

HEK293T cells were transfected with pCDNA3-GFP-IDH2 (WT) plasmid (left column) or pCDNA3-GFP-IDH2(R140Q) plasmid (right column), then fixed and stained with anti-IDH2(R140Q) monoclonal antibody (Cat. #26165).

