

IDH2 Antibody

Catalog # ASC11155

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P48735
Other Accession	NP_002159 , 28178832
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	50909
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IDH2 antibody can be used for detection of IDH2 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	3418
Other Names	Isocitrate dehydrogenase [NADP], mitochondrial, IDH, 1.1.1.42, ICD-M, IDP, NADP(+)-specific ICDH, Oxalosuccinate decarboxylase, IDH2
Target/Specificity	IDH2;
Reconstitution & Storage	IDH2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	IDH2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IDH2
Function	Plays a role in intermediary metabolism and energy production (PubMed: 19228619 , PubMed: 22416140). It may tightly associate or interact with the pyruvate dehydrogenase complex (PubMed: 19228619 , PubMed: 22416140).
Cellular Location	Mitochondrion {ECO:0000250 UniProtKB:P33198}.

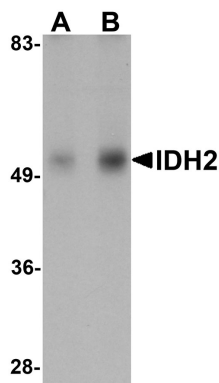
Background

IDH2 Antibody: Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Two NADP(+)-dependent isocitrate dehydrogenases have been found as homodimer: IDH1 is predominantly cytosolic and peroxisomal and IDH2 is mitochondrial. Both IDH1 and IDH2 play significant roles in the tricarboxylic acid cycle (TCA), and defects in IDH1 as well as IDH2 have been implicated in the development of glioma as well as other malignancies.

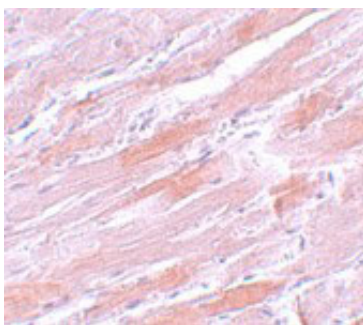
References

Geisbrecht BV and Gould SJ. The human PICD gene encodes a cytoplasmic and peroxisomal NADP(+)-dependent isocitrate dehydrogenase. *J. Biol. Chem.*1999; 274:30527-33.
Przybyla-Zawislak B, Gadde DM, Ducharme K, et al. Genetic and biochemical interactions involving tricarboxylic acid cycle (TCA) function using a collection of mutants defective in all TCA cycle genes. *Genetics*1999; 152:153-66.
Dang L, White DW, and Gross S. Cancer-associated IDH1 mutations produce 2-hydroxyglutarate. *Nature*2009; 462:739-44.
Tan H, Parsons DW, Jin G, et al. IDH1 and IDH2 mutations in gliomas. *N. Engl. J. Med.*2009; 360:765-73.

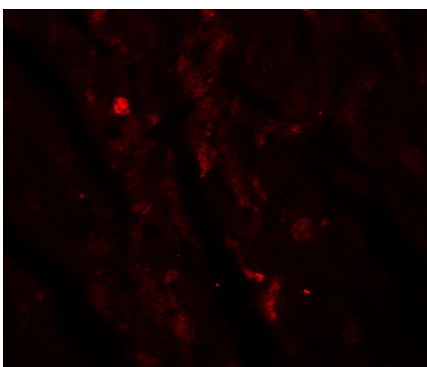
Images



Western blot analysis of IDH2 in human heart tissue lysate with IDH2 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of IDH2 in mouse heart tissue with IDH2 antibody at 5 µg/mL.



Immunofluorescence of IDH2 in mouse heart tissue with IDH2 antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.