

IDH2 Antibody

Catalog # ASC11155

Specification

IDH2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

WB, IHC, IF P48735

NP_002159, 28178832 Human, Mouse, Rat

Rabbit Polyclonal

IgG

IDH2 antibody can be used for detection of

IDH2 by Western blot at 1 - 2 $\mu g/mL$.

Antibody can also be used for

immunohistochemistry starting at 5 $\mu g/mL$. For immunofluorescence start at 20 $\mu g/mL$.

IDH2 Antibody - Additional Information

Gene ID 3418

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.

IDH2 Antibody - Protein Information

Name IDH2

Function

Plays a role in intermediary metabolism and energy production (PubMed:22416140, PubMed:19228619). It may tightly associate or interact with the pyruvate dehydrogenase complex (PubMed:22416140, PubMed:22416140, PubMed:19228619).

Cellular Location

Mitochondrion {ECO:0000250|UniProtKB:P33198}.



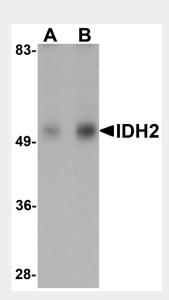
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IDH2 Antibody - Protocols

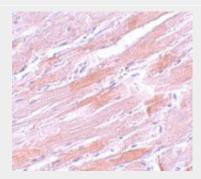
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IDH2 Antibody - Images

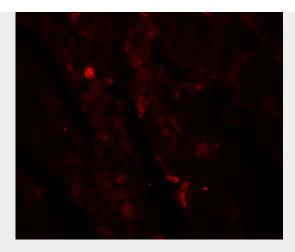


Western blot analysis of IDH2 in human heart tissue lysate with IDH2 antibody at (A) 1 and (B) 2 μg/mL.



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





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

IDH2 Antibody - 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.

IDH2 Antibody - 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. Genetics1999; 152:153-66.

Dang L, White DW, and Gross S. Cancer-associated IDH1 mutations produce 2-hydroxyglutarate. Nature2009; 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.