

A5106

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IDH1 Rabbit mAb

Catalog No.: A5106

Recombinant

1 Publications

Basic Information

Observed MW

46kDa

Calculated MW

47kDa

Category

Monoclonal Antibody

Applications

WB,IF/ICC,ELISA

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC54138

Recommended Dilutions

WB 1:2000 - 1:10000

IF/ICC 1:50 - 1:200

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Contact



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Background

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(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. Each NADP(+)-dependent isozyme is a homodimer. The protein encoded by this gene is the NADP(+)-dependent isocitrate dehydrogenase found in the cytoplasm and peroxisomes. It contains the PTS-1 peroxisomal targeting signal sequence. The presence of this enzyme in peroxisomes suggests roles in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2-oxoglutarate, namely the alpha-hydroxylation of phytanic acid. The cytoplasmic enzyme serves a significant role in cytoplasmic NADPH production. Alternatively spliced transcript variants encoding the same protein have been found for this gene.

Immunogen Information

Gene ID

3417

Swiss Prot

O75874

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

IDH; IDP; IDCD; IDPC; PICD; HEL-216; HEL-S-26; IDH1

Product Information

Source

Rabbit

Isotype

IgG

Purification

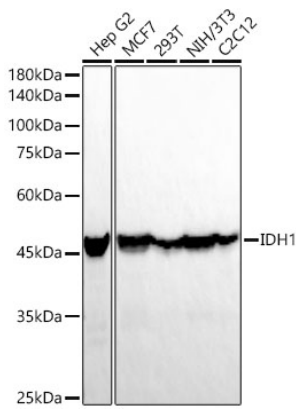
Affinity purification

Storage

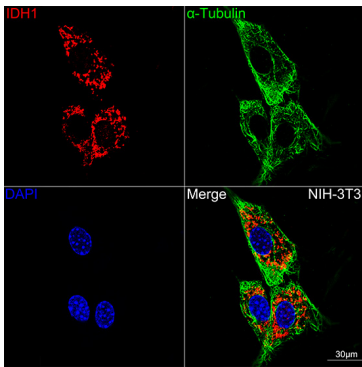
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



Western blot analysis of various lysates, using IDH1 Rabbit mAb (A5106) at 1:10000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90s.



Confocal imaging of NIH/3T3 cells using IDH1 Rabbit mAb (A5106, dilution 1 : 100) (Red). The cells were counterstained with α-Tubulin (AC012, dilution 1 : 400) (Green). DAPI was used for nuclear staining (blue). Objective: 60x