

IDH1 Polyclonal Antibody

Catalog No: #30263



Package Size: #30263-1 50ul #30263-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

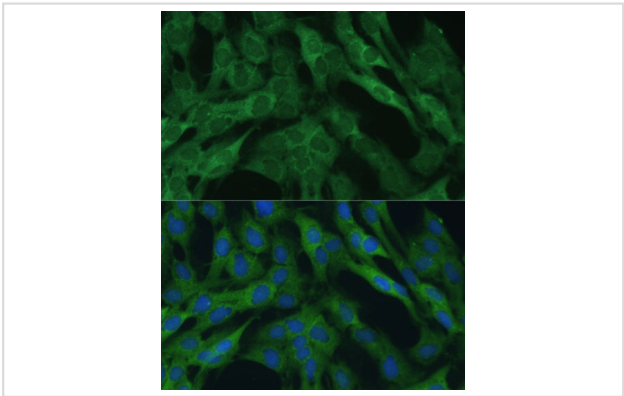
Description

Product Name	IDH1 Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Affinity purification
Applications	WB,IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	Recombinant fusion protein of human IDH1 (NP_005887.2).
Other Names	IDH1; HEL-216; HEL-S-26; IDCD; IDH; IDP; IDPC; PICD; isocitrate dehydrogenase [NADP] cytoplasmic
Accession No.	Swiss-Prot#:O75874NCBI Gene ID:3417
Uniprot	O75874
GeneID	3417;
Calculated MW	45kDa
Formulation	Avoid freeze / thaw cycles. Buffer: PBS with 50% glycerol, pH7.4.
Storage	Store at -20°C

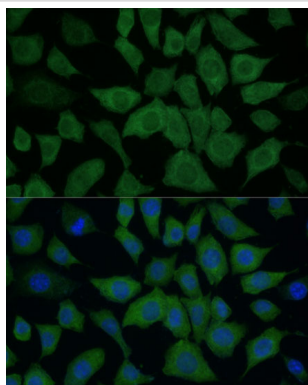
Application Details

WB 1:500 - 1:2000IF 1:50 - 1:200IP 1:50 - 1:100

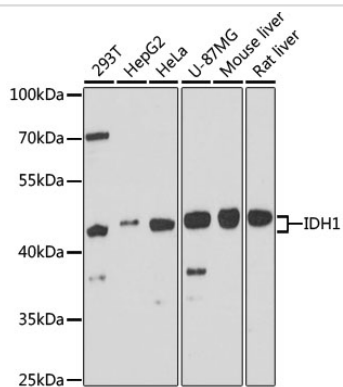
Images



Immunofluorescence analysis of C6 cells using IDH1 Polyclonal at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using IDH1 Polyclonal at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Western blot analysis of extracts of various cell lines, using IDH1 at 1:3000 dilution.

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.

Note: This product is for in vitro research use only