

Product datasheet for **TA377320**

Isocitrate dehydrogenase (IDH1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IP, WB
Recommended Dilution:	WB,1:500 - 1:2000 IF,1:50 - 1:200 IP,1:50 - 1:100
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-414 of human IDH1 (NP_005887.2).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	46kDa
Gene Name:	isocitrate dehydrogenase (NADP(+)) 1, cytosolic
Database Link:	Entrez Gene 3417 Human O75874



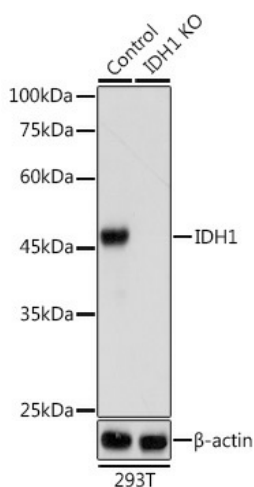
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Background:

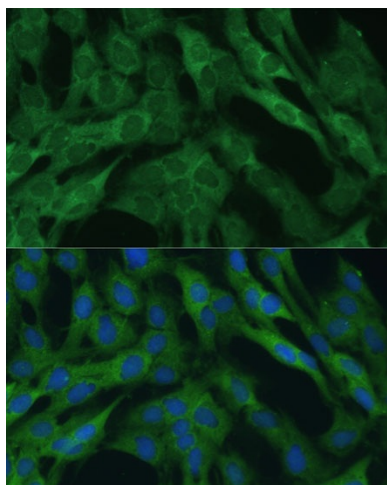
Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate 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.

Synonyms:

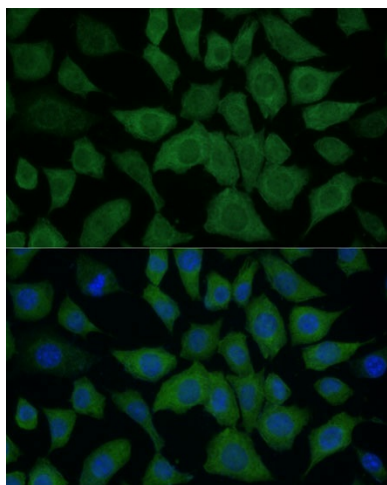
IDCD; IDH; IDP; IDPC; OTTHUMP00000206464; OTTHUMP00000206465; OTTHUMP00000206466; PICD

Product images:

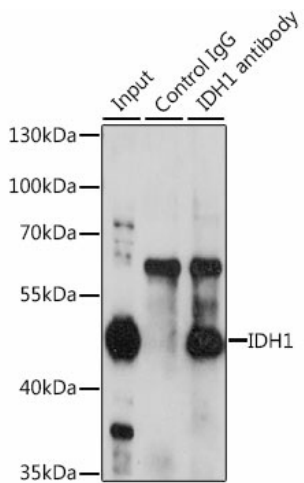
Western blot analysis of extracts of 293T cells, using IDH1 antibody (TA377320) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit. | Exposure time: 60s.



Immunofluorescence analysis of C6 cells using IDH1 Polyclonal Antibody (TA377320) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using IDH1 Polyclonal Antibody (TA377320) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 200ug extracts of HeLa cells, using 3 ug IDH1 antibody (TA377320). Western blot was performed from the immunoprecipitate using IDH1 antibody (TA377320) at a dilution of 1:1000.