[KO Validated] IDH1 Rabbit Polyclonal Antibody

CAB13245

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

46KDa

Calculated MW:

46kDa

Applications:

WB IF IP

Reactivity:

Human, Mouse, Rat

Antibody Information

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

Source:
Rabbit

Isotype:
IgG

Purification:
Affinity purification

Protein 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

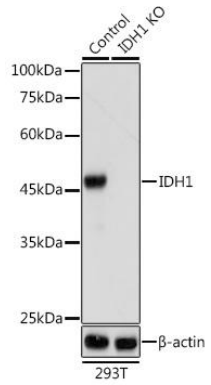
Uniprot
O75874

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

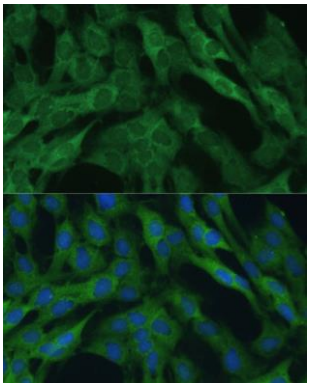
Immunogen:
Recombinant fusion protein containing a sequence corresponding to amino acids 1-414 of human IDH1 (NP_005887.2).

Storage:
Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

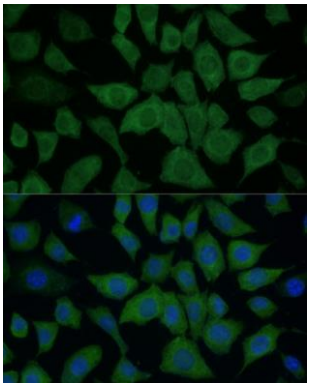
Product Images



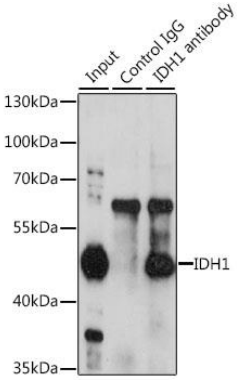
Western blot analysis of extracts of 293T cells, using IDH1 antibody (CAB13245) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 60s.



Immunofluorescence analysis of C6 cells using IDH1 Polyclonal Antibody (CAB13245) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using IDH1 Polyclonal Antibody (CAB13245) 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 (CAB13245). Western blot was performed from the immunoprecipitate using IDH1 antibody (CAB13245) at a dilition of 1:1000.

