

[KO Validated] IDH1 Rabbit pAb

Catalog No.: A13245 **KO** **Validated** **3 Publications**

Basic Information

Observed MW

46kDa

Calculated MW

47kDa

Category

Primary antibody

Applications

WB, IF/ICC, IP, ELISA

Cross-Reactivity

Human, Mouse, Rat

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.

Recommended Dilutions

WB 1:500 - 1:1000**IF/ICC** 1:50 - 1:200**IP** 0.5µg-4µg antibody for
200µg-400µg extracts of
whole cells**ELISA** Recommended starting
concentration is 1 µg/mL.
Please optimize the
concentration based on
your specific assay
requirements.

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Immunogen Information

Gene ID

3417

Swiss Prot

O75874

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

IDH; IDP; IDCD; IDPC; PICD; HEL-216; HEL-S-26; H1

Product Information

Source

Rabbit

Isotype

IgG

Purification

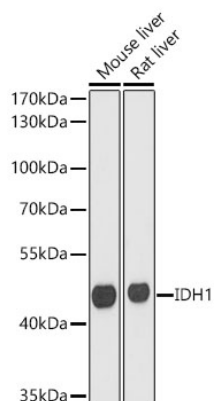
Affinity purification

Storage

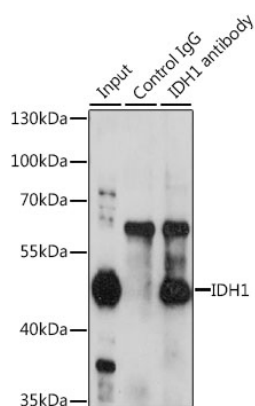
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

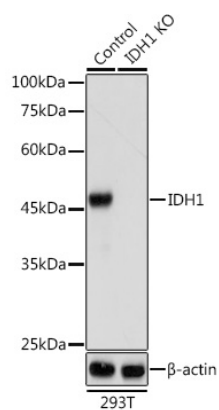
Validation Data



Western blot analysis of various lysates using IDH1 Rabbit pAb (A13245) at 1:3000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates / proteins: 25 µg per lane.
 Blocking buffer: 3 % nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 30s.

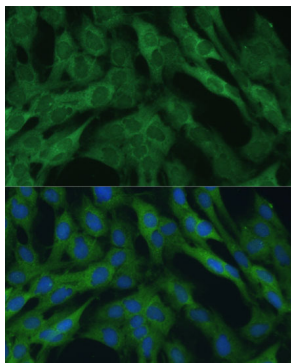


Immunoprecipitation analysis of 200 µg extracts of HeLa cells, using 3 µg IDH1 antibody (A13245).
 Western blot was performed from the immunoprecipitate using IDH1 antibody (A13245) at a dilution of 1:1000.

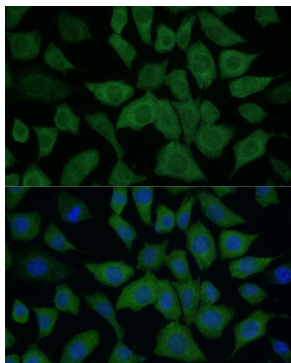


Western blot analysis of lysates from wild type (WT) and IDH1 knockout (KO) 293T cells, using [KO Validated] IDH1 Rabbit pAb (A13245) at 1:1000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 60s.

Validation Data



Immunofluorescence analysis of C6 cells using [KO Validated] IDH1 Rabbit pAb (A13245) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using [KO Validated] IDH1 Rabbit pAb (A13245) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.