

ARG42740 anti-IDH1 antibody

Package: 50 µg
Store at: -20°C

Summary

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|---------------------|--|
| Product Description | Rabbit Polyclonal antibody recognizes IDH1 |
| Tested Reactivity | Hu, Ms, Rat |
| Predict Reactivity | Hm |
| Tested Application | FACS, ICC/IF, IHC-Fr, IHC-P, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | IDH1 |
| Species | Human |
| Immunogen | Synthetic peptide corresponding to aa. 381-413 of Human IDH1. (KGLPNVQRSDYLNTFEFMDKLGLENLKIKLAQAK) |
| Conjugation | Un-conjugated |
| Alternate Names | IDPC; EC 1.1.1.42; Cytosolic NADP-isocitrate dehydrogenase; IDP; HEL-S-26; HEL-216; Isocitrate dehydrogenase [NADP] cytoplasmic; IDH; PICD; IDCD; NADP; Oxalosuccinate decarboxylase |

Application Instructions

| Application table | Application | Dilution |
|-------------------|-------------|----------------|
| | FACS | 1:150 - 1:500 |
| | ICC/IF | 1:200 - 1:1000 |
| | IHC-Fr | 1:200 - 1:1000 |
| | IHC-P | 1:200 - 1:1000 |
| | WB | 1:500 - 1:2000 |

Application Note
IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size
47 kDa

Properties

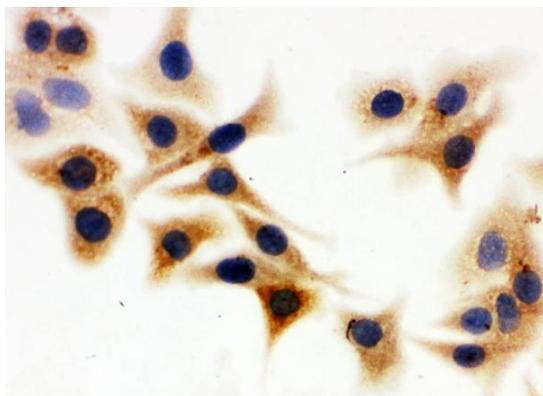
| | |
|--------------|---|
| Form | Liquid |
| Purification | Affinity purification with immunogen. |
| Buffer | 0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Sodium azide and 5% BSA. |
| Preservative | 0.05% Sodium azide |

| | |
|---------------------|--|
| Stabilizer | 5% BSA |
| Concentration | 0.5 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

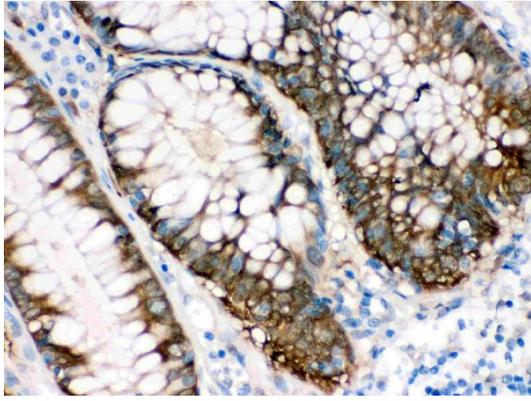
| | |
|-----------------------|--|
| Gene Symbol | IDH1 |
| Gene Full Name | isocitrate dehydrogenase 1 (NADP+), soluble |
| Background | Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes 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. [provided by RefSeq, Sep 2013] |
| Highlight | Related products: Isocitrate Dehydrogenase antibodies ; Isocitrate Dehydrogenase ELISA Kits ; Anti-Rabbit IgG secondary antibodies ; Related news: TCA intermediate fumarate promotes mitobiogenesis |
| Calculated Mw | 47 kDa |
| PTM | Acetylation at Lys-374 dramatically reduces catalytic activity. [UniProt] |
| Cellular Localization | Cytoplasm. Peroxisome. [UniProt] |

Images



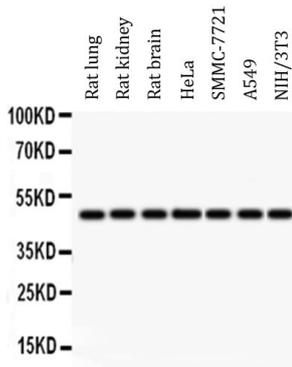
ARG42740 anti-IDH1 antibody ICC image

Immunocytochemistry: A549 cells were blocked with 10% goat serum and then stained with ARG42740 anti-IDH1 antibody at 1 µg/ml dilution, overnight at 4°C.



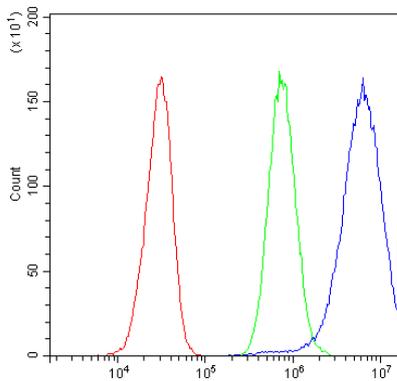
ARG42740 anti-IDH1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42740 anti-IDH1 antibody at 1 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



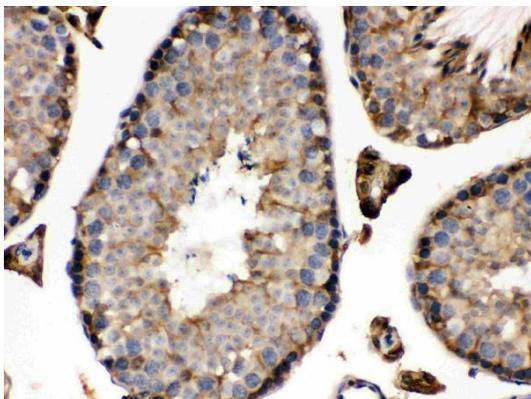
ARG42740 anti-IDH1 antibody WB image

Western blot: 50 μg of sample under reducing conditions. Rat lung, Rat kidney, Rat brain, HeLa, SMMC-7721, A549 and NIH/3T3 whole cell lysates stained with ARG42740 anti-IDH1 antibody at 0.5 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



ARG42740 anti-IDH1 antibody FACS image

Flow Cytometry: HepG2 cells were blocked with 10% normal goat serum and then stained with ARG42740 anti-IDH1 antibody (blue) at 1 $\mu\text{g}/10^6$ cells for 30 min at 20°C, followed by incubation with DyLight[®]488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 $\mu\text{g}/10^6$ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



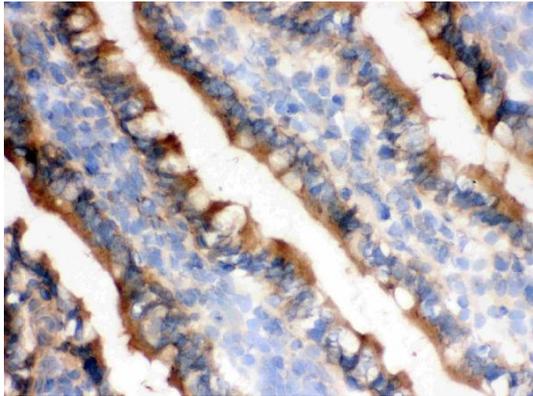
ARG42740 anti-IDH1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse testis tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42740 anti-IDH1 antibody at 1 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



ARG42740 anti-IDH1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat testis tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42740 anti-IDH1 antibody at 1 μ g/ml dilution, overnight at 4°C.



ARG42740 anti-IDH1 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat small intestine tissue. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42740 anti-IDH1 antibody at 1 μ g/ml dilution, overnight at 4°C.
