

Datasheet for ABIN7602760
anti-IDH1 antibody (C-Term)



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Overview

Quantity:	100 µg
Target:	IDH1
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This IDH1 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-IDH1 Antibody Picoband® (monoclonal, 16H7)
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human IDH1, different from the related mouse and rat sequences by one amino acid.
Clone:	16H7
Isotype:	IgG1
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-IDH1 Antibody Picoband® (monoclonal, 16H7) (ABIN7602760). Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing

Product Details

antibodies are designated as Picoband, ensuring unmatched performance.

Purification: Immunogen affinity purified.

Target Details

Target: IDH1

Alternative Name: IDH1 ([IDH1 Products](#))

Background: Synonyms: Cytosolic NADP isocitrate dehydrogenase antibody|Cytosolic NADP-isocitrate dehydrogenase antibody|Epididymis luminal protein 216 antibody|Epididymis secretory protein Li 26 antibody|HEL-216 antibody|HEL-S-26 antibody|ICDH antibody|IDCD antibody|IDH antibody|IDH1 antibody|IDHC_HUMAN antibody|IDP antibody|IDPC antibody|Isocitrate dehydrogenase [NADP] cytoplasmic antibody|Isocitrate dehydrogenase 1 (NADP+) soluble antibody|NADP dependent isocitrate dehydrogenase cytosolic antibody|NADP dependent isocitrate dehydrogenase peroxisomal antibody|NADP (+)-specific ICDH antibody|Oxalosuccinate decarboxylase antibody|PICD antibody

Tissue Specificity: Ubiquitous. Expressed in platelets.

Background: Isocitrate dehydrogenase 1 (NADP+), soluble is an enzyme that in humans is encoded by the IDH1 gene. 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.

Molecular Weight: 47 kDa

Gene ID: 3417

UniProt: [075874](#)

Target Details

Pathways: [Warburg Effect](#)

Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat
Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human
Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human
1. "Entrez Gene: Isocitrate dehydrogenase 1 (NADP+), soluble". 2. Watanabe T, Nobusawa S, Kleihues P, Ohgaki H (April 2009). "IDH1 mutations are early events in the development of astrocytomas and oligodendrogliomas.". Am J Pathol. 174 issue = 4 (4): 1149-53.

Restrictions: For Research Use only

Handling

Format: Liquid

Reconstitution: Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.