

Datasheet for ABIN3043855  
**anti-IDH1 antibody (C-Term)**

5 Images

1 Publication

[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	IDH1
Binding Specificity:	AA 381-413, C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Isocitrate dehydrogenase [NADP] cytoplasmic(IDH1) detection. Tested with WB, IHC-P in Human,Mouse, Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human IDH1 (381-413aa KGLPNVQRSDYLNTFEFMDKLGLENLKIKLAQAK), different from the related mouse and rat sequences by one amino acid.
Sequence:	KGLPNVQRSD YLNTFEFMDK LGLENLKIKLA QAK
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Isocitrate dehydrogenase [NADP] cytoplasmic(IDH1) detection. Tested with WB, IHC-P in Human,Mouse, Rat.</p> <p>Gene Name: isocitrate dehydrogenase 1 (NADP+), soluble</p> <p>Protein Name: Isocitrate dehydrogenase [NADP] cytoplasmic</p>

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: IDH1

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

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.

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

Gene ID: 3417

UniProt: [O75874](#)

Pathways: [Warburg Effect](#)

## Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

## Handling

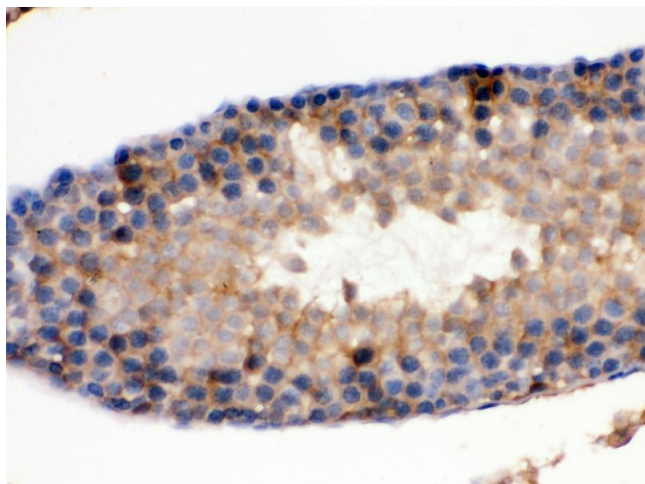
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

## Publications

Product cited in:	Lang, Schulte, Goddard, Hedrick, Schulte, Wei, Schmiedt: "Transplantation of mouse embryonic stem cells into the cochlea of an auditory-neuropathy animal model: effects of timing after injury." in: <b>Journal of the Association for Research in Otolaryngology : JARO</b> , Vol. 9, Issue 2, pp. 225-40, (2008) ( <a href="#">PubMed</a> ).  Lang, Ebihara, Schmiedt, Minamiguchi, Zhou, Smythe, Liu, Ogawa, Schulte: "Contribution of
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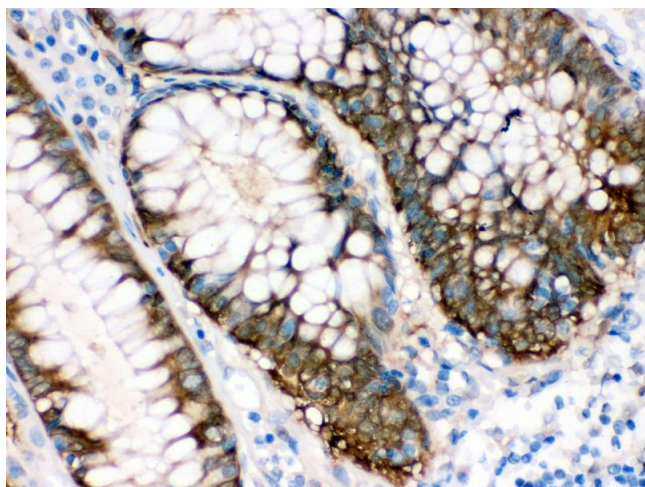
bone marrow hematopoietic stem cells to adult mouse inner ear: mesenchymal cells and fibrocytes." in: **The Journal of comparative neurology**, Vol. 496, Issue 2, pp. 187-201, (2006) ([PubMed](#)).

Validation report #300029 for Immunohistochemistry (IHC)



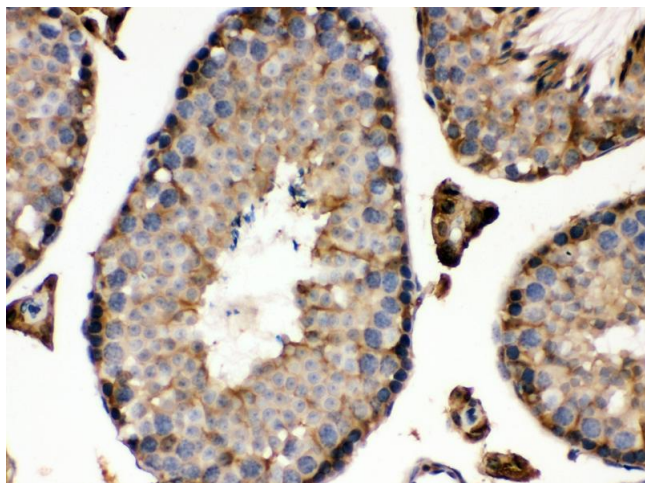
Immunohistochemistry (Paraffin-embedded Sections)

Image 1.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2.



Immunohistochemistry (Paraffin-embedded Sections)

Image 3.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN3043855.