Datasheet for ABIN2785882

anti-IDH1 antibody (C-Term)

2 Images

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Overview

Quantity:	100 µL
Target:	IDH1
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat, Dog, Saccharomyces cerevisiae, Cow, Horse, Guinea Pig, Rabbit, Sheep
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IDH1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the C terminal region of human IDH1
Sequence:	MMTSVLVCPD GKTVEAEAAH GTVTRHYRMY QKGQETSTNP IASIFAWTRG
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 100%, Rat: 100%, Sheep: 100%, Yeast: 93%
Characteristics:	This is a rabbit polyclonal antibody against IDH1. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	IDH1

Target Details

Alternative Name:	IDH1 (IDH1 Products)
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(+).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.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. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications. Alias Symbols: IDH, IDP, PICD, IDCD, IDPC Protein Interaction Partner: SUMO2, UBC, GLRX3, UBE2H, THOP1, TALDO1, RCN1, RBBP7, RANBP1, PTMS, OXCT1, NME1, HSPE1, GOT1, FDPS, DCK, ANXA6, ADSS, NME1-NME2, EFHD2, C12orf10, SBDS, CHMP4A, CBX3, SUGT1, PEX5, AK2, AK1, MDH2, ASF1B, CDK2, SLC2A4, ELAVL1, SUMO4, ZHX1, Protein Size: 414
Molecular Weight:	47 kDa
Gene ID:	3417
NCBI Accession:	NM_005896, NP_005887
UniProt:	O75874

Target Details

Pathways:	Warburg Effect

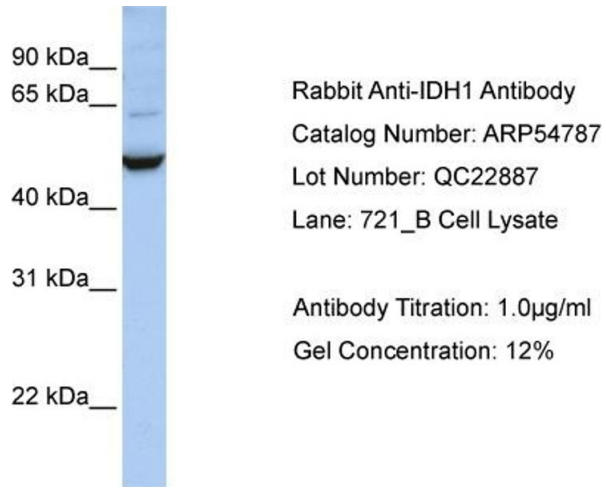
Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 414 AA
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
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 freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

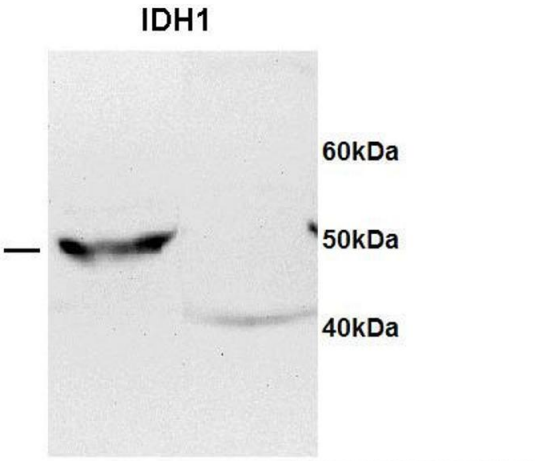
Images



Western Blotting

Image 1.

Images



See Immunoblot 2 Data for more information.

Western Blotting

Image 2. Sample type: 1. HEPG2 (50ug)

2. Drosophila extract (50ug)

Primary dilution: 1:1000

Secondary Antibody: mouse anti-Rabbit HRP

Secondary Dilution: 1:5000

Image Submitted by: Xinyang Bing

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