

ARG55374 anti-IDH1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes IDH1
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Bov
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	IDH1
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 116-143 (Center) of Human IDH1.
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	1:10 - 1:50
	ICC/IF	1:10 - 1:50
	IHC-P	1:50 - 1:100
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HepG2	

Properties

Form	Liquid
Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
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.

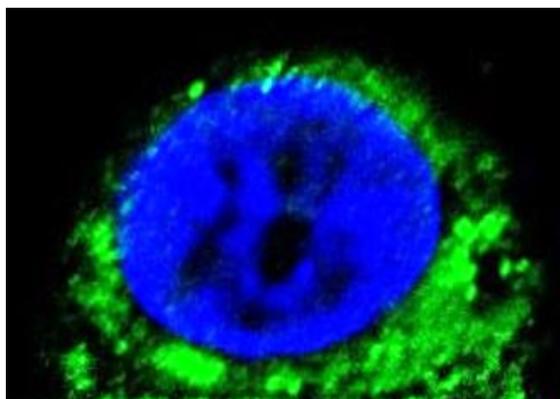
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

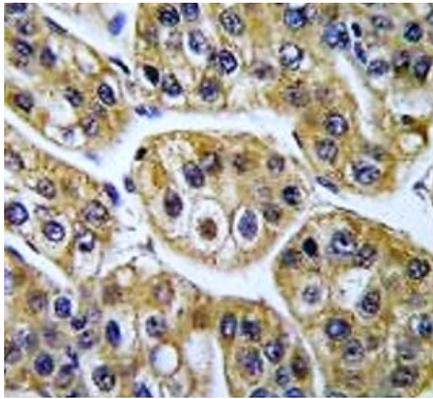
Gene Symbol	IDH1
Gene Full Name	isocitrate dehydrogenase 1 (NADP+), soluble
Background	Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other 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
Research Area	Cancer antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	47 kDa
PTM	Acetylation at Lys-374 dramatically reduces catalytic activity.
Cellular Localization	Cytoplasm. Peroxisome

Images



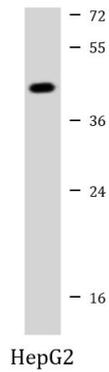
ARG55374 anti-IDH1 antibody ICC/IF image

Immunofluorescence: HepG2 cells stained with ARG55374 anti-IDH1 antibody (green). DAPI (blue) for nuclear staining.



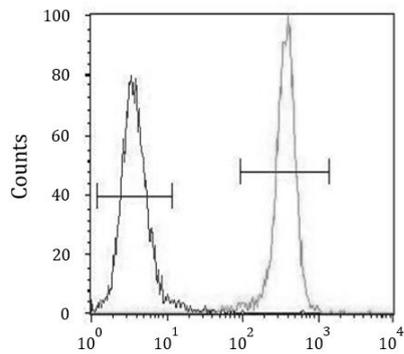
ARG55374 anti-IDH1 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human hepatocarcinoma tissue stained with ARG55374 anti-IDH1 antibody.



ARG55374 anti-IDH1 antibody WB image

Western blot: 35 µg of HepG2 cell lysate stained with ARG55374 anti-IDH1 antibody at 1:1000 dilution.



ARG55374 anti-IDH1 antibody FACS image

Flow Cytometry: 293 cells stained with ARG55374 anti-IDH1 antibody (right histogram) or without primary antibody control (left histogram), followed by incubation with FITC labelled secondary antibody.