ARG57161
anti-IDH1 antibody [25H10]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [25H10] recognizes IDH1
Tested Reactivity	Hu, Ms
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	25H10
Isotype	IgG2a, kappa
Target Name	IDH1
Species	Human
Immunogen	Recombinant fragment around aa. 1-414 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
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

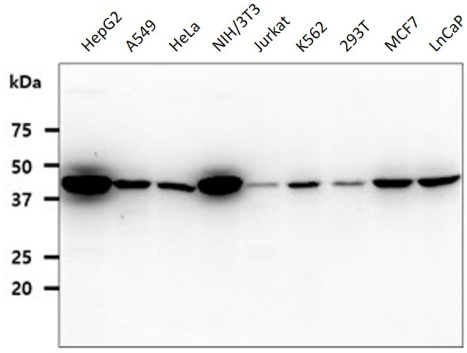
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 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. 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

Database links	GeneID: 15926 Mouse GeneID: 3417 Human Swiss-port # O75874 Human Swiss-port # O88844 Mouse
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-Mouse IgG secondary antibodies; Related news: TCA intermediate fumarate promotes mitobiogenesis
Calculated Mw	47 kDa
PTM	Acetylation at Lys-374 dramatically reduces catalytic activity.

Images



ARG57161 anti-IDH1 antibody [25H10] WB image

Western blot: 40 µg of 1) HepG2, 2) A549, 3) HeLa, 4) NIH/3T3, 5) Jurkat, 6) K562, 7) 293T, 8) MCF7, and 9) LnCaP cell lysates stained with ARG57161 anti-IDH1 antibody [25H10] at 1:1000 dilution.