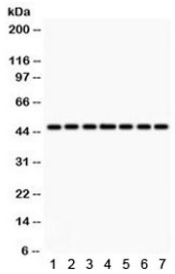
IDH1 Antibody (R31836)

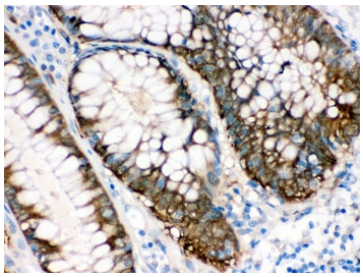
Catalog No.	Formulation	Size
R31836	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

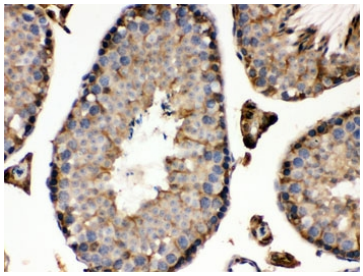
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
UniProt	O75874
Localization	Cytoplasmic, nuclear
Applications	Western blot: 0.1-0.5ug/ml IHC (FFPE): 0.5-1ug/ml IHC (Frozen): 0.5-1ug/ml ICC (FFPE): 1-2ug/ml
Limitations	This IDH1 antibody is available for research use only.



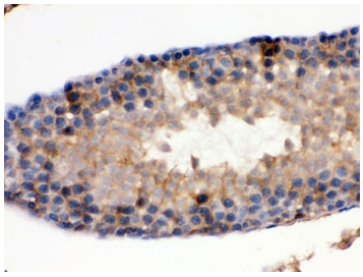
Western blot testing of 1) rat lung, 2) rat kidney, 3) rat brain, 4) human HeLa, 5) SMMC, 6) A549 and 7) mouse NIH3T3 lysate with IDH1 antibody. Predicted/observed molecular weight ~47 kDa.



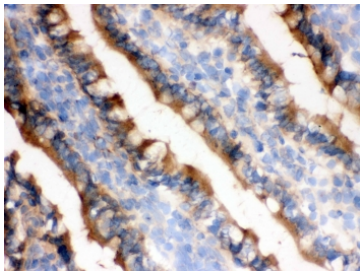
IHC testing of FFPE human intestinal cancer tissue with IDH1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



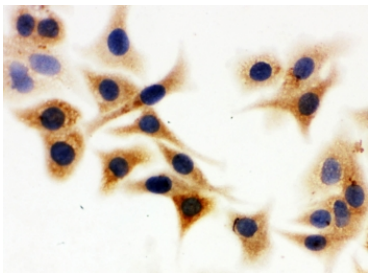
IHC testing of FFPE mouse testis with IDH1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat testis with IDH1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of frozen rat small intestine tissue with IDH1 antibody.



ICC staining of FFPE human A549 cells with IDH1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.

Description

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.

For an alternative monoclonal clone targeting IDH1, see our IDH1 Antibody IDH1/1152 / Cytosolic Isocitrate Dehydrogenase Antibody page.

Application Notes

Optimal dilution of the IDH1 antibody should be determined by the researcher.

Immunogen

Amino acids KGLPNVQRSDYLNTFEFMDKLGENLKIKLAQAK of human IDH1 were used as the immunogen for the IDH1 antibody.

Storage

After reconstitution, the IDH1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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