

Anti-IDH1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

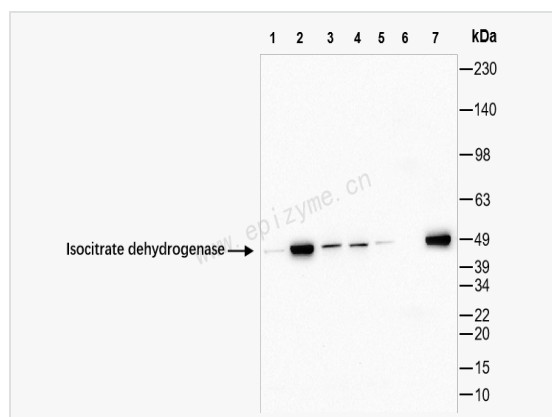
Catalog # R010951

Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:3,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	48K31L79
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Isocitrate dehydrogenase
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-IDH1 Rabbit mAb [48K31L79] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	PICD; IDH1; Isocitrate dehydrogenase [NADP] cytoplasmic; IDH; Cytosolic NADP-isocitrate dehydrogenase; IDPc; NADP(+)-specific ICDH; Oxalosuccinate decarboxylase.
Calculated MW	Calculated MW: 47 kDa; Observed MW: 47 kDa
Uniprot ID	O75874
Gene ID	3417
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]
Cellular Location	Cytoplasm.Cytosol.Peroxisome.



Western Blot - Anti-IDH1 Rabbit mAb [48K31L79]

All lanes: R010951 at 1:3,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: K562 (Human chronic myeloid leukemia cell) whole cell lysates

Lane 4: U87 (Human malignant glioblastoma epithelial cell) whole cell lysates

Lane 5: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 6: Mouse heart whole tissue lysates

Lane 7: Mouse liver whole tissue lysates

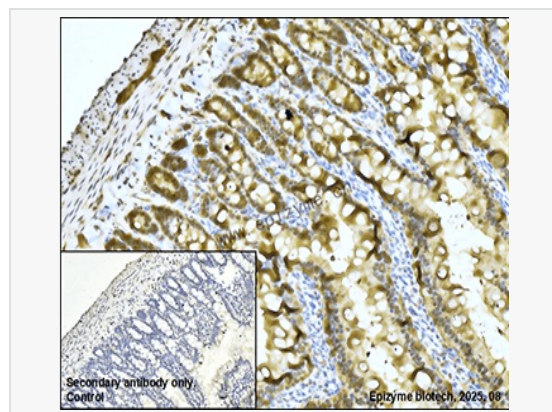
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 47 kDa

Observed band size: 47 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-IDH1 Rabbit mAb [48K31L79]

Sample: Paraformaldehyde-fixed, paraffin embedded rat colon tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R010951 at 1:200 dilution

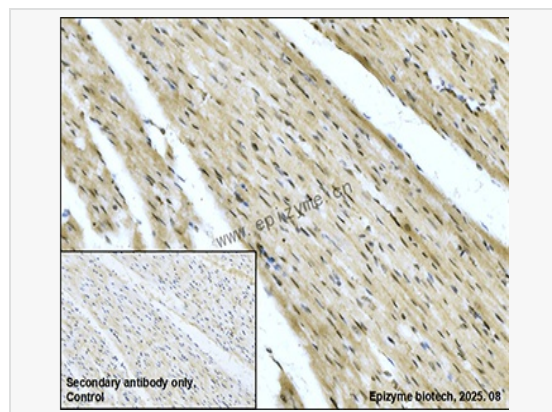
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-IDH1 Rabbit mAb [48K31L79]

Sample: Paraformaldehyde-fixed, paraffin embedded rat heart tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R010951 at 1:200 dilution

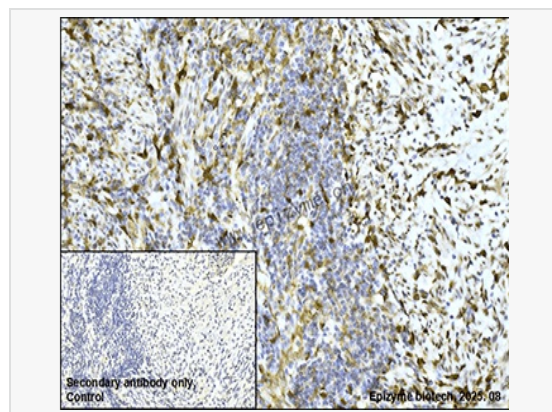
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-IDH1 Rabbit mAb [48K31L79]

Sample: Paraformaldehyde-fixed, paraffin embedded human endometrial carcinoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R010951 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.