

Mouse Anti-IDH1 antibody

SLM-60556M

Product Name IDH1

Chinese Name 异柠檬酸脱氢酶 1 单克隆抗体

Alias IDHC_HUMAN; Isocitrate dehydrogenase [NADP] cytoplasmic; PICD; EC:1.1.1.42; IDH; Cytosolic NADP-isocitrate dehydrogenase; IDPc; NADP(+)-specific ICDH; Oxalosuccinate decarboxylase; IDP; IDCD; HEL-216; HEL-S-26;

Immunogen Species Mouse

Clonality Monoclonal

Clone NO. C5A6

React Species Human,Rat

Applications WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:50-200,IF=1:100-500
(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 46kDa

Cellular localization The cell membrane

Form Liquid

Concentration 1mg/ml

Lsotype IgG1/Kappa

Purification Affinity purified by Protein G

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Product Detail 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]

Subcellular Location:

Cytoplasm. Peroxisome.

SWISS:

O75874

Gene ID:

3417

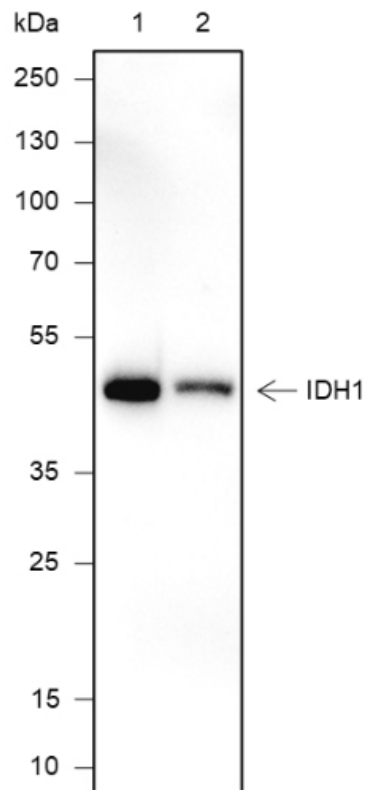
Database links:

[Entrez Gene: 3417](#) Human

[SwissProt: O75874](#) Human

IDH1 又称 PICD 和 IDP, 属于异柠檬酸脱氢酶和异丙基苹果酸脱氢酶家族。这是人类原发性脑癌主要亚型的共同特征。基因变异与软骨 Tumour 如内生软骨瘤或软骨肉瘤有关。Arg-132 到 Cys、Gly 或 His 的突变消除了异柠檬酸到 α -酮戊二酸的转化。相反, α -酮戊二酸转化为 R (-) -2-羟基戊二酸。

**Product
Picture**



Blocking buffer: 5% NFDN/TBST

Primary Ab dilution: 1:1000

Primary Ab incubation condition: room temperature 2h

Secondary Ab: Goat Anti-Mouse IgG H&L (HRP)

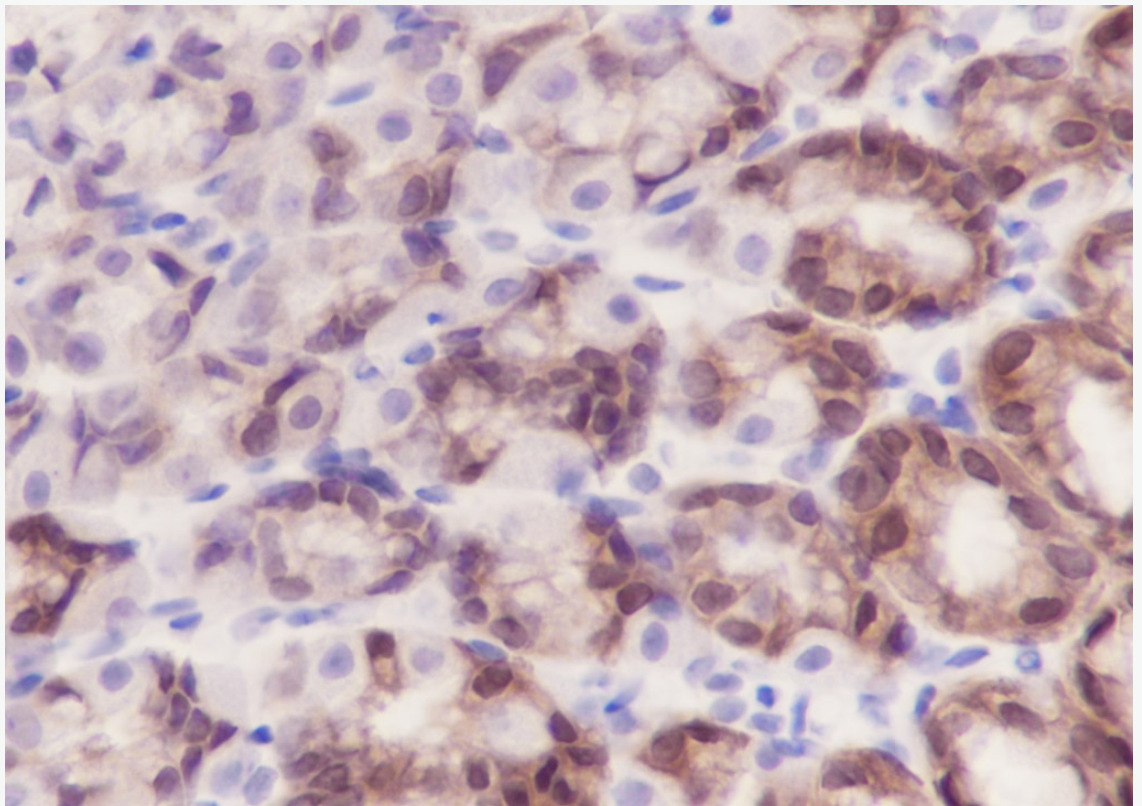
Lysate: 1: HeLa, 2: SH-SY5Y

Protein loading quantity: 20 μ g

Exposure time: 10 s

Predicted MW: 47 kDa

Observed MW: 47 kDa



Tissue: Rat stomach

Section type: Formalin fixed & Paraffin -embedded section

Retrieval method: High temperature and high pressure

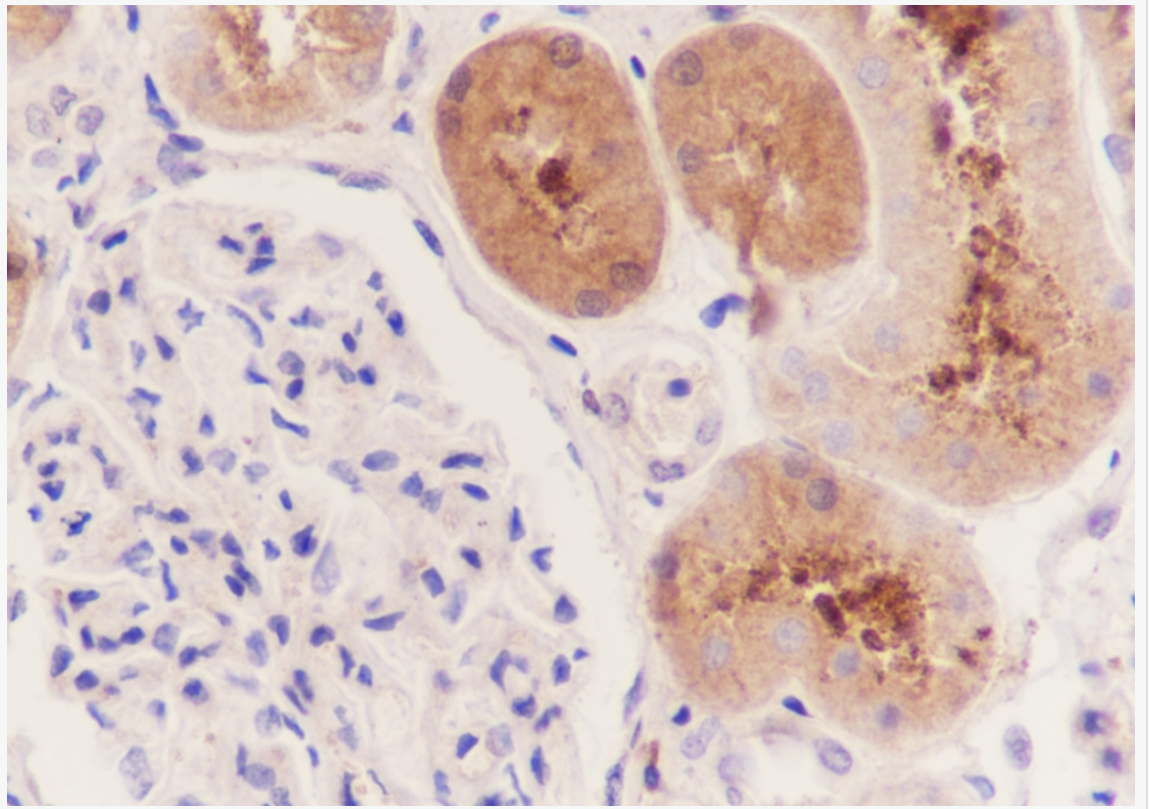
Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary Ab dilution: 1:100

Primary Ab incubation condition: 1 hour at room temperature

Secondary Ab: SP Kit(Mouse)(sp-0024)

Counter stain: Hematoxylin (Blue)

Comment: Color brown is the positive signal for SLM-60556M



Tissue: Human kidney

Section type: Formalin fixed & Paraffin -embedded section

Retrieval method: High temperature and high pressure

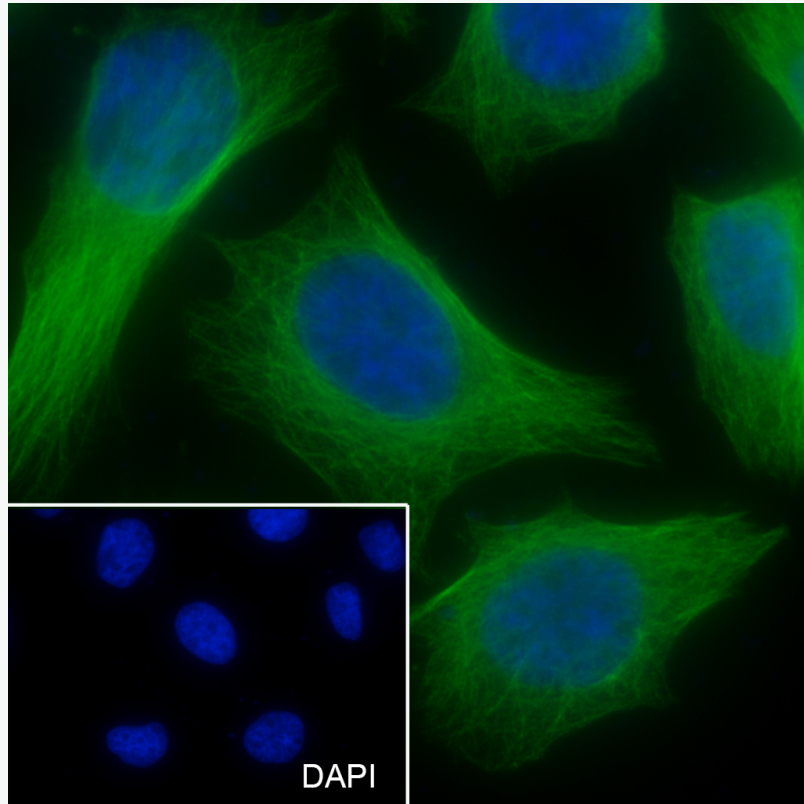
Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary Ab dilution: 1:100

Primary Ab incubation condition: 1 hour at room temperature

Secondary Ab: SP Kit(Mouse)(sp-0024)

Counter stain: Hematoxylin (Blue)

Comment: Color brown is the positive signal for SLM-60556M



Cell line: HeLa

Fixative: 4% Paraformaldehyde

Permeabilization: 0.1% TritonX-100

Primary ab dilution: 1:50

Primary incubation condition: 4°C overnight

Secondary ab: Goat Anti-Mouse IgG

Nuclear counter stain: DAPI (Blue)

Comment: Color green is the positive signal for SLM-60556M