



# IDH1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-04335
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	IDH1
<b>Protein Name</b>	Isocitrate dehydrogenase [NADP] cytoplasmic
<b>Immunogen</b>	Synthesized peptide derived from the N-terminal region of human IDH1.
<b>Specificity</b>	IDH1 Polyclonal Antibody detects endogenous levels of IDH1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	IDH1; PICD; Isocitrate dehydrogenase [NADP] cytoplasmic; IDH; Cytosolic NADP-isocitrate dehydrogenase; IDP; NADP(+)-specific ICDH; Oxalosuccinate decarboxylase
<b>Observed Band</b>	46kD
<b>Cell Pathway</b>	Cytoplasm, cytosol . Peroxisome .
<b>Tissue Specificity</b>	Brain,Cajal-Retzius cell,Fetal brain cortex,Human endometri
<b>Function</b>	catalytic activity:Isocitrate + NADP(+) = 2-oxoglutarate + CO(2) + NADPH.,catalytic activity:Oxalosuccinate + NADP(+) = 2-oxoglutarate + CO(2) + NADPH.,cofactor:Binds 1 magnesium or manganese ion per subunit.,disease:Defects in IDH1 are a cause of glioblastoma multiforme (GBM) [MIM:137800]; also called familial glioma of brain. Gliomas are central nervous system neoplasms derived from glial cells and comprise astrocytomas, glioblastoma multiforme, oligodendrogliomas, and ependymomas.,miscellaneous:Cancer mutations affecting Arg-132 are tissue-specific, and suggest that this residue plays a unique role in the development of high-grade gliomas.,online information:Isocitrate dehydrogenase entry,similarity:Belongs to the isocitrate and isopropylmalate dehydrogenases family.,subunit:Homodimer.,

**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

**matters needing attention**

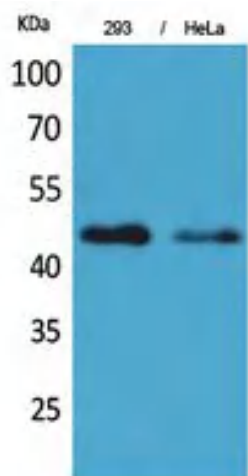
Avoid repeated freezing and thawing!

**Usage suggestions**

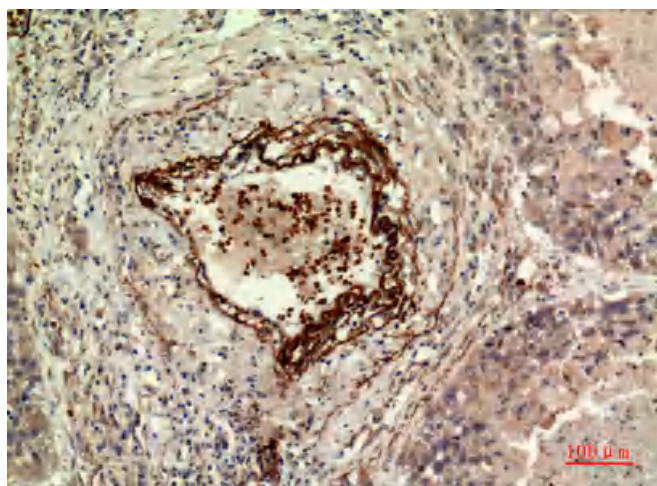
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



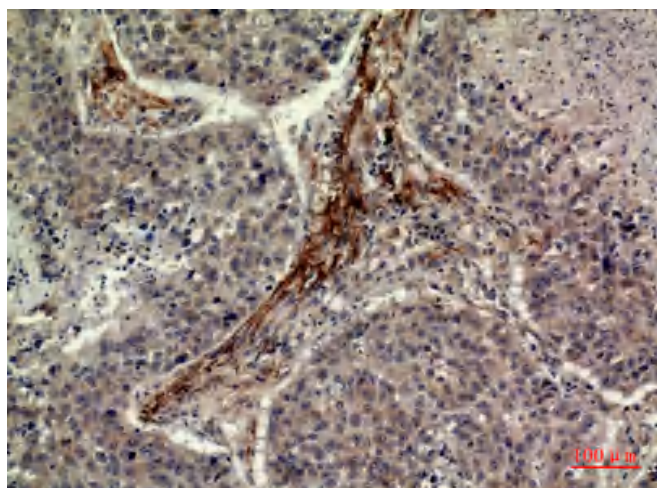
## Products Images



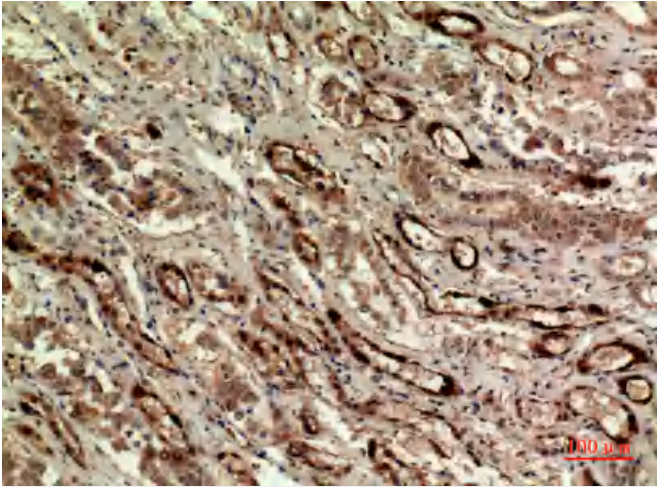
Western Blot analysis of 293, HeLa cells using IDH1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



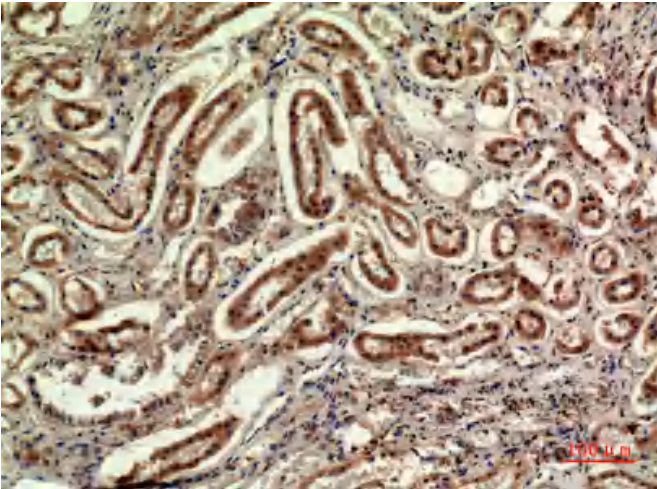
Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:100