



IDH1 Polyclonal Antibody

Catalog No	YP-Ab-04335
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	IDH1
Immunogen	Synthesized peptide derived from the N-terminal region of human IDH1.
Specificity	IDH1 Polyclonal Antibody detects endogenous levels of IDH1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Cytosolic NADP-isocitrate dehydrogenase;EC:1.1.1.42;IDCD;IDH;IDH 1;IDH1; Isocitrate dehydrogenase [NADP] cytoplasmic;PICD;IDP;NADP(+)-specific ICDH; Oxalosuccinate decarboxylase
Observed Band	46kD
Calculated Molecular Weight	46kD
Cell Pathway	Cytoplasm, cytosol . Peroxisome .
Tissue Specificity	Brain,Cajal-Retzius cell,Fetal brain cortex,Human endometri
Function	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

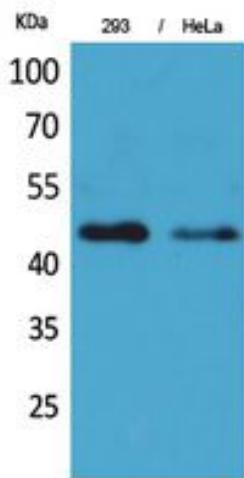
Avoid repeated freezing and thawing!

Usage suggestions

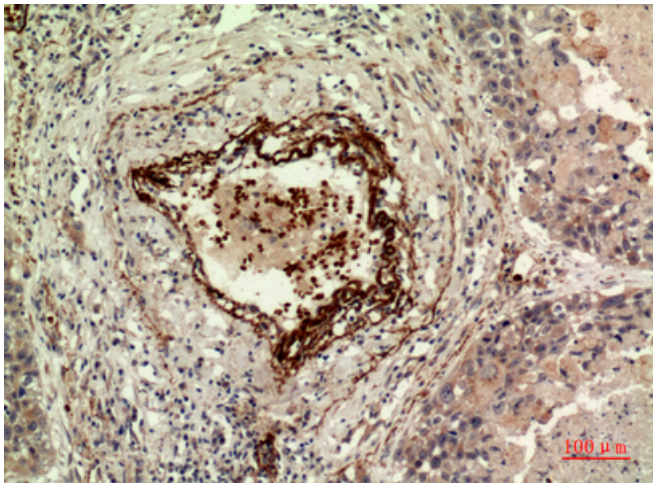
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



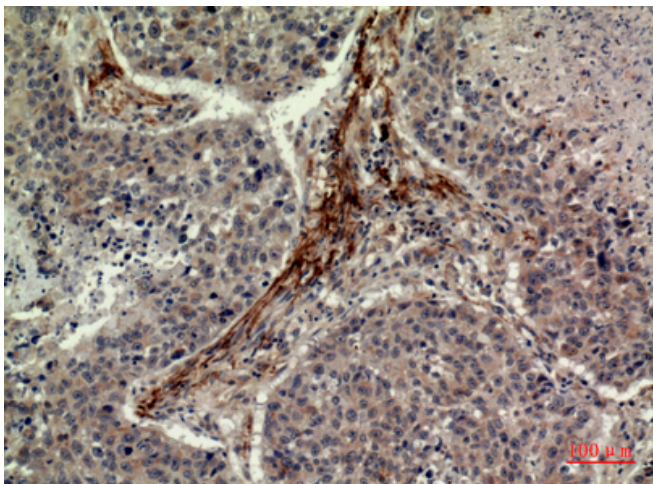
Products Images



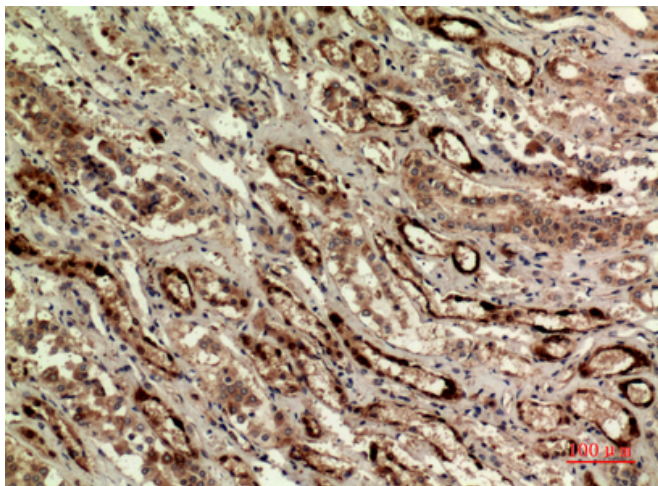
Western Blot analysis of 293, HeLa cells using IDH1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



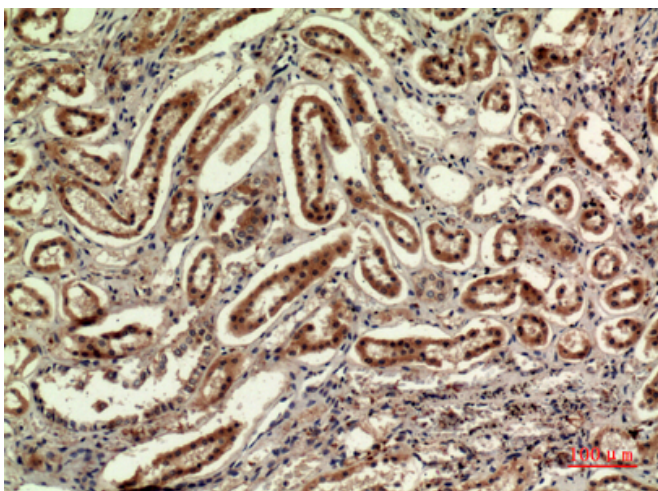
Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100



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