Immunoway
Best Tools for immunology Research

IDH1 Polyclonal Antibody

Catalog No :	YT5416
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	IDH1
Fields :	>>Citrate cycle (TCA cycle);>>Glutathione metabolism;>>Metabolic pathways;>>Carbon metabolism;>>2-Oxocarboxylic acid metabolism;>>Biosynthesis of amino acids;>>Peroxisome;>>Central carbon metabolism in cancer
Gene Name :	IDH1
Protein Name :	Isocitrate dehydrogenase [NADP] cytoplasmic
Human Gene Id :	3417
Human Swiss Prot No :	O75874
Mouse Gene Id :	15926
Mouse Swiss Prot No :	O88844
Rat Gene Id :	24479
Rat Swiss Prot No :	P41562
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
Dilution :	WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:20000.. IF 1:50-200

Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	46kD
Cell Pathway :	Citrate cycle (TCA cycle);Glutathione metabolism;
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
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.,
Subcellular Location :	Cytoplasm, cytosol . Peroxisome .
Expression :	Brain,Cajal-Retzius cell,Fetal brain cortex,Human endometri
Tag :	hot
Sort :	8307
No4 :	1

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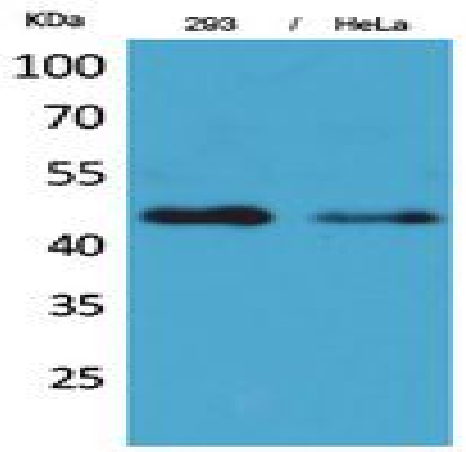
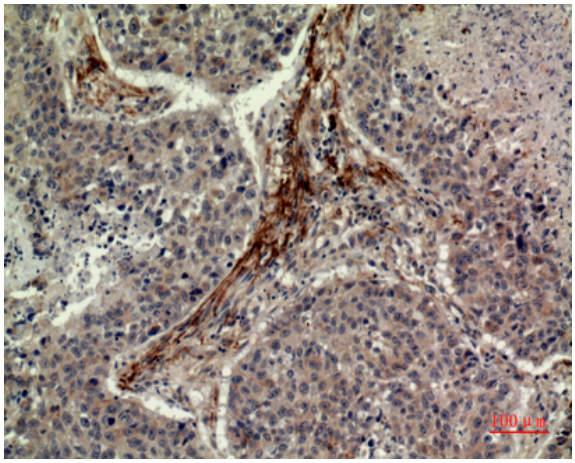
Host : Rabbit

Modifications : Unmodified

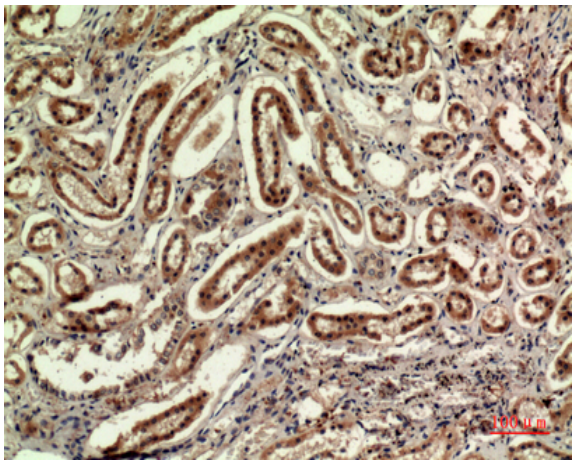
Products Images



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-kidney, antibody was diluted at 1:100