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IDH1 Rabbit mAb

Catalog # AP74833

Product Information

Application	WB, IHC-P, IP
Primary Accession	O75874
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	46659

Additional Information

Gene ID	3417
Other Names	IDH1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IP~~1:10-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

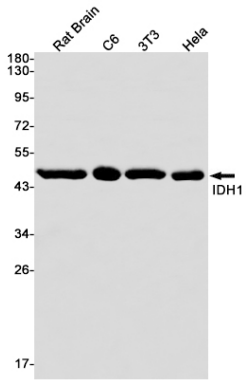
Protein Information

Name	IDH1
Synonyms	PICD
Function	Catalyzes the NADP(+)-dependent oxidative decarboxylation of isocitrate (D-threo-isocitrate) to 2-ketoglutarate (2-oxoglutarate), which is required by other enzymes such as the phytanoyl-CoA dioxygenase (PubMed:10521434, PubMed:19935646). Plays a critical role in the generation of NADPH, an important cofactor in many biosynthesis pathways (PubMed:10521434). May act as a corneal epithelial crystallin and may be involved in maintaining corneal epithelial transparency (By similarity).
Cellular Location	Cytoplasm, cytosol. Peroxisome

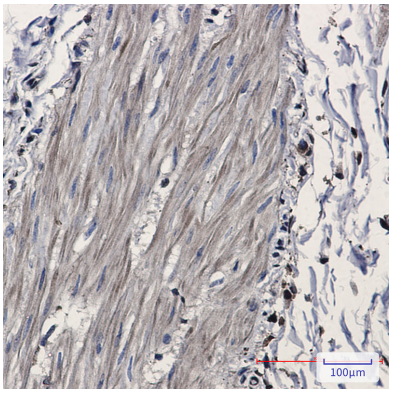
Background

IDH1, also named as PICD and IDP, belongs to the isocitrate and isopropylmalate dehydrogenases family. It is a common feature of a major subset of primary human brain cancers. It can form a homodimer(PMID:15173171). IDH1 mutation is always heterozygotic and IDH1 functions as a dimer, theoretically there will be 25% each wild type and mutant homo-dimers and 50% hetero-dimers present in the tumor cells(PMID:21079649).

Images



Western blot analysis of IDH1 in rat Brain, C6, 3T3, Hela lysates using IDH1 antibody.



Immunohistochemistry analysis of paraffin-embedded Human Cholangiocarcinoma using Isocitrate dehydrogenase antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.