10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# 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. |

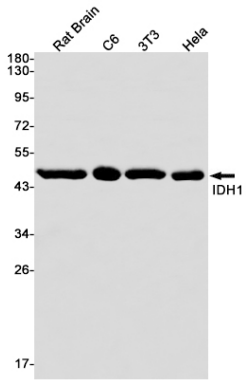
## Protein Information

| | |
|---|---|
| **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 |

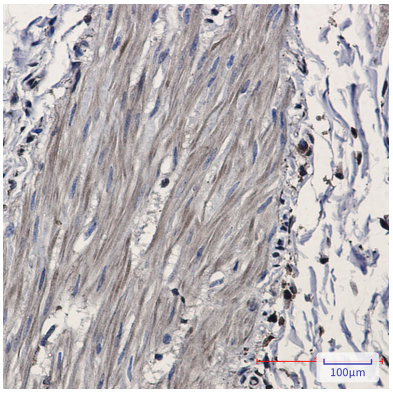
## Background

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 ).

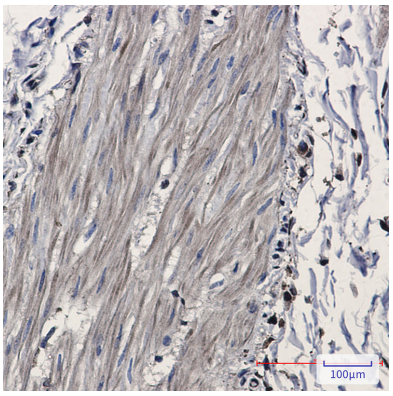
## Images




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.




Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.