For Research Use Only

IDH1 Monoclonal antibody

Catalog Number:66197-1-Ig 5 Publications

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Basic Information

Catalog Number:
66197-1-Ig

Size:
1800 ug/ml

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG19293

GenBank Accession Number:
BC012846

GeneID (NCBI):
3417

UNIPROT ID:
O75874

Full Name:
isocitrate dehydrogenase 1 (NADP+), soluble

Calculated MW:
414 aa, 47 kDa

Observed MW:
46 kDa

Purification Method:
Protein A purification

CloneNo.:
2A6A2

Recommended Dilutions:
WB 1:1000-1:4000
IHC 1:2000-1:8000
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:
WB, IP

Species Specificity:
human

Cited Species:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HepG2 cells, HeLa cells, DU 145 cells, MCF-7 cells

IHC : human liver cancer tissue, human gliomas tissue

IF/ICC : HepG2 cells,

Background Information

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).

Notable Publications

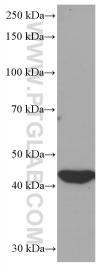
Author	Pubmed ID	Journal	Application
Teresa W-M Fan	36150727	J Immunol	
Florent Laferrière	30559480	Nat Neurosci	
Sikai Wang	38280407	Biochim Biophys Acta Mol Cell Res	WB

Storage

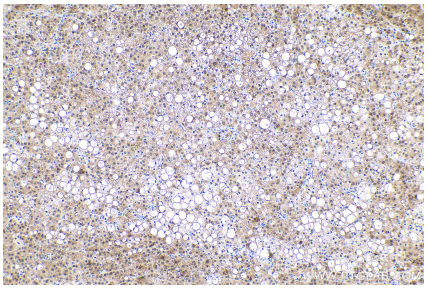
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

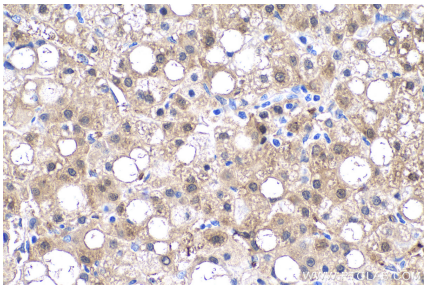
Selected Validation Data



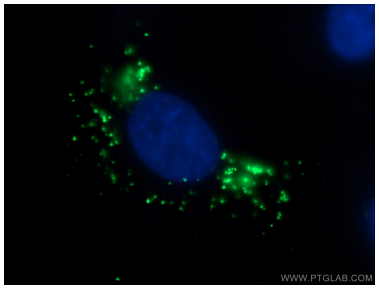
HepG2 cells were subjected to SDS PAGE followed by western blot with 66197-1-Ig (IDH1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



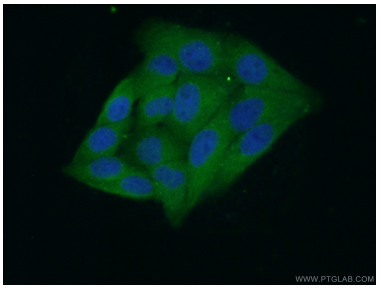
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66197-1-Ig (IDH1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



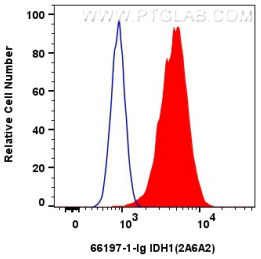
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66197-1-Ig (IDH1 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66197-1-Ig (IDH1 antibody) at dilution of 1:400 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (10% Formaldehyde) fixed HepG2 cells using 66197-1-Ig(IDH1 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug IDH1 Monoclonal antibody (66197-1-Ig, Clone:2A6A2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1) (red), or 0.25 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).