For Research Use Only

IDH1 Recombinant antibody

Catalog Number:81176-1-RR



Basic Information

Catalog Number: GenBank Accession Number:

81176-1-RR BC012846 Protein A purification GeneID (NCBI): CloneNo.:

100ul, Concentration: 1000 ug/ml by 3417 6L18

Nanodrop: **UNIPROT ID:** Recommended Dilutions: 075874 WB 1:5000-1:50000 Rabbit IHC 1:50-1:500 Full Name:

Isotype: isocitrate dehydrogenase 1 (NADP+),

soluble IgG

Immunogen Catalog Number: Calculated MW: 414 aa, 47 kDa AG19749

> Observed MW: 46 kDa

Applications

Tested Applications:

WB, IHC, FC (Intra), ELISA

Species Specificity:

human, mouse, rat

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: HeLa cells, HepG2 cells, LNCaP cells, mouse liver

Purification Method:

tissue, rat liver tissue

IHC: human gliomas tissue,

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 $mutation is always \ heterozygotic \ and \ IDH1 \ functions \ as \ a \ dimer, theoretically \ there \ will \ be \ 25\% \ each \ wild \ type \ and \ a$ mutant homo-dimers and 50% hetero-dimers present in the tumor cells(PMID:21079649).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

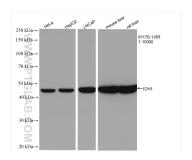
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

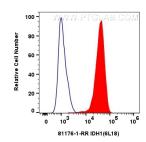
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data



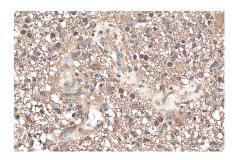
Various lysates were subjected to SDS PAGE followed by western blot with 81176-1-RR (IDH1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 bours



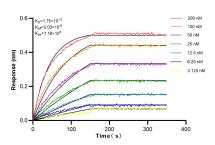
1x10^6 HepG2 cells were intracellularly stained with 0.25 ug IDH1 Recombinant antibody (81176-1-RR, Clone:6L18) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffinembedded human gliomas tissue slide using 81176-1-RR (IDH1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human gliomas tissue slide using 81176-1-RR (IDH1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLL) kinetic assays of 81176-1-RR against Human IDH1 were performed. The affinity constant is 17.5 pM.