

For Research Use Only

IDH3B Polyclonal antibody, PBS Only

Catalog Number:15576-1-PBS



Basic Information

Catalog Number:

15576-1-PBS

Concentration:

1mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG7965

GenBank Accession Number:

BC001960

GeneID (NCBI):

3420

UNIPROT ID:

O43837

Full Name:

isocitrate dehydrogenase 3 (NAD+)

beta

Calculated MW:

42 kDa

Observed MW:

42 kDa

Purification Method:

Antigen affinity purification

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Species Specificity:

human, mouse, rat

Background Information

Isocitrate dehydrogenase 3 (IDH3) is a key enzyme in the mitochondrial tricarboxylic acid (TCA) cycle, which catalyzes the decarboxylation of isocitrate into α -ketoglutarate and concurrently converts NAD⁺ into NADH. IDH3B (Isocitrate dehydrogenase 3 (NAD⁺) beta), also named as RP46, is the beta subunit of IDH3 and controls its substrate levels in the TCA cycle, and it is required for sperm mitochondrial metabolism and spermiogenesis (PMID: 18806796, PMID: 35985423). In addition, IDH3B expression increased PFKFB3 protein levels and enhanced glucose uptake, and high expression of IDH3B correlated with poor survival in patients with ESCC, suggesting a potential application of IDH3B in prognosis (PMID: 31053633).

Storage

Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only, pH7.3

For technical support and original validation data for this product please contact:

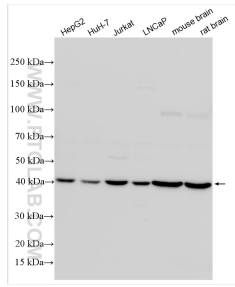
T: 4006900926

E: Proteintech-CN@ptglab.com

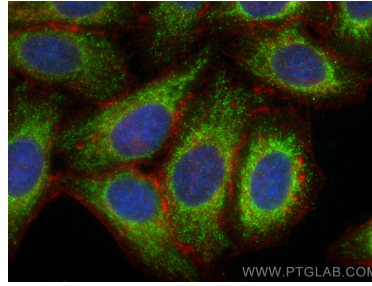
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



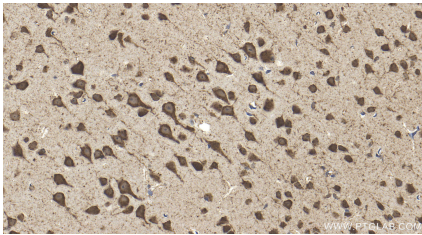
Various lysates were subjected to SDS PAGE followed by western blot with 15576-1-AP (IDH3B antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 15576-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using IDH3B antibody (15576-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 15576-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 15576-1-AP (IDH3B antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 15576-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 15576-1-AP (IDH3B antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 15576-1-PBS in a different storage buffer formulation.