

For Research Use Only

# IDH3B Polyclonal antibody, PBS Only

Catalog Number:15576-1-PBS



## Basic Information

<b>Catalog Number:</b> 15576-1-PBS	<b>GenBank Accession Number:</b> BC001960	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3420	
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O43837	
<b>Isotype:</b> IgG	<b>Full Name:</b> isocitrate dehydrogenase 3 (NAD+) beta	
<b>Immunogen Catalog Number:</b> AG7965	<b>Calculated MW:</b> 42 kDa	
	<b>Observed MW:</b> 42 kDa	

## 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  $\alpha$ -ketoglutarate and concurrently converts NAD<sup>+</sup> 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, DH3B 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.

**Storage Buffer:**  
PBS only, pH7.3

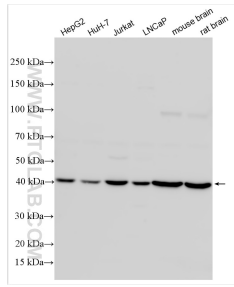
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

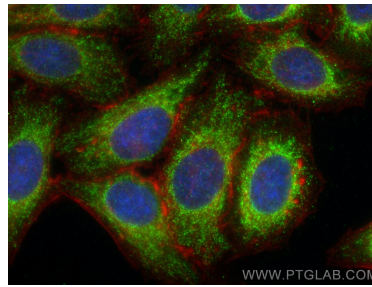
E: proteintech@ptglab.com  
W: ptglab.com

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

## Selected Validation Data



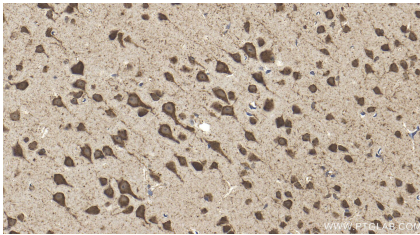
Various lysates were subjected to SDS PAGE followed by western blot with 15576-1-AP (IDH3B antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 15576-1-PBS in a different storage buffer formulation.



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.