

For Research Use Only

# IDH3B Monoclonal antibody

Catalog Number: 68199-1-Ig



## Basic Information

<b>Catalog Number:</b> 68199-1-Ig	<b>GenBank Accession Number:</b> BC001960	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 3420	<b>CloneNo.:</b> 2D11A9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O43837	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG1	<b>Full Name:</b> isocitrate dehydrogenase 3 (NAD+) beta	
<b>Immunogen Catalog Number:</b> AG8693	<b>Calculated MW:</b> 42 kDa	
	<b>Observed MW:</b> 39-42 kDa	

## Applications

### Tested Applications:

WB, ELISA

### Species Specificity:

Human, Mouse, Rat, Rabbit, Pig

### Positive Controls:

WB : LNCaP cells, Jurkat cells, pig brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue, pig heart tissue, rabbit heart tissue, rat heart tissue

## 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<sup>+</sup>) 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 -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:

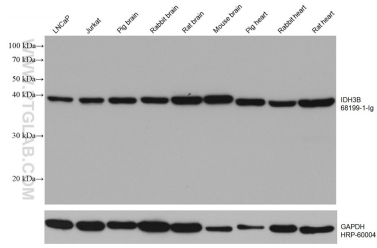
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E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68199-1-Ig (IDH3B antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.