

# IDH3B Monoclonal antibody

Catalog Number: 68199-1-Ig

## Basic Information

**Catalog Number:**

68199-1-Ig

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG8693

**GenBank Accession Number:**

BC001960

**GeneID (NCBI):**

3420

**UNIPROT ID:**

O43837

**Full Name:**isocitrate dehydrogenase 3 (NAD+)  
beta**Calculated MW:**

42 kDa

**Observed MW:**

39-42 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

2D11A9

**Recommended Dilutions:**

WB 1:5000-1:50000

## 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 α-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

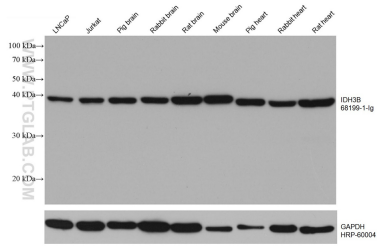
For technical support and original validation data for this product please contact:

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## 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.