## For Research Use Only

## IDH3B Monoclonal antibody

Catalog Number: 68199-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

68199-1-lg BC001960

Size: GeneID (NCBI): CloneNo.: 150ul , Concentration: 1000 µg/ml by 3420 2D11A9

Source: isocitrate dehydrogenase 3 (NAD+)

Mouse beta

Isotype: Calculated MW: IgG1 42 kDa
Immunogen Catalog Number: Observed MW: AG8693 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

**Purification Method:** 

Protein G purification

Recommended Dilutions:

WB 1:5000-1:50000

## **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+ 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 -20°C. Stable for one year after shipment.

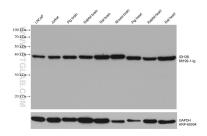
Storage Buffer:

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 68199-1-1g (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.