GAPDH Mouse mAb (High Dilution)

Catalog No.: AC033 299 Publications



Basic Information

Observed MW 36kDa

Calculated MW 36kDa

Category Loading control antibody

Applications WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity Human, Mouse, Rat

CloneNo number AMC0062

Background

This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against E. coli, P. aeruginosa, and C. albicans. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants. **Note**Due to the high antibody titer, it is advisable to be diluted before use. **Please dilute 5µL of the antibody solution with 45µL of PBS solution, containing 50% glycerol. The diluted antibody can be stored at -20°C.**

Recommended Dilutions

WB	1:100000 - 1:660000
IHC-P	1:100 - 1:500
IF/ICC	1:50 - 1:200
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID 2597

Swiss Prot P04406

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

G3PD; GAPD; HEL-S-162eP; GAPDH

Contact

<u>m.cn</u>
m.cn

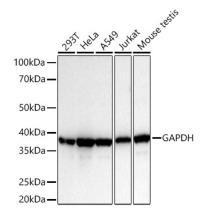
Product Information

Source Mouse **Isotype** IgG2b,Kappa **Purification** Affinity purification

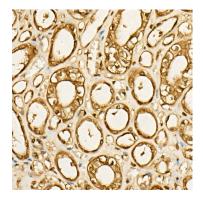
Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.09% sodium azide,50% glycerol,pH7.3.

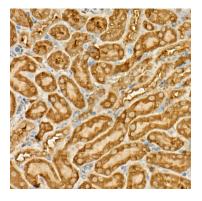
Validation Data



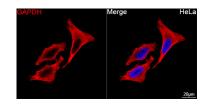
Western blot analysis of various lysates using GAPDH Mouse mAb (High Dilution) (AC033) at 1:220000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.

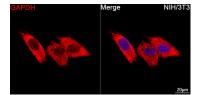


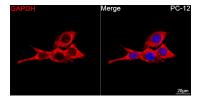
Immunohistochemistry analysis of paraffinembedded Human kidney using GAPDH Mouse mAb (High Dilution) (AC033) at dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffinembedded Mouse kidney using GAPDH Mouse mAb (High Dilution) (AC033) at dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.







Confocal imaging of NIH/3T3 cells using GAPDH Mouse mAb (High Dilution) (AC033, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x. Confocal imaging of PC-12 cells using GAPDH Mouse mAb (High Dilution) (AC033, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

Confocal imaging of HeLa cells using GAPDH Mouse mAb (High Dilution) (AC033, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.