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GAPDH Mouse mAb (High Dilution)

Catalog No.: AC033 181 Publications

Basic Information

Observed MW
36kDa

Calculated MW
36kDa

Category
Loading control antibody

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

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.

Recommended Dilutions

WB	1:10000 - 1:760000
IHC-P	1:100 - 1:500
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID
2597

Swiss Prot
P04406

Immunogen
Recombinant fusion protein containing a sequence corresponding to amino acids 1-335 of human GAPDH (P04406).

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

Contact

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Product Information

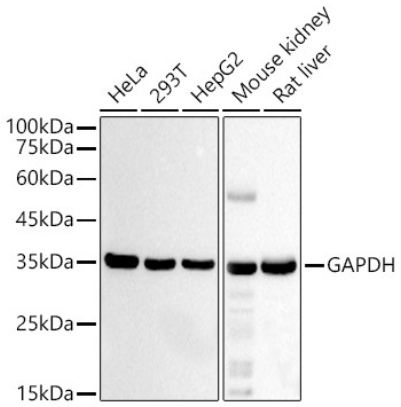
Source
Mouse

Isotype
IgG2b,Kappa

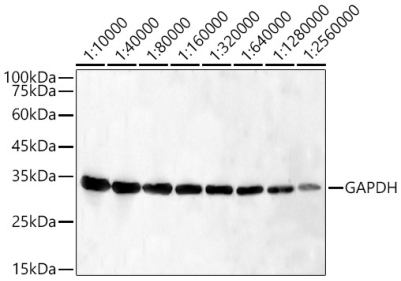
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

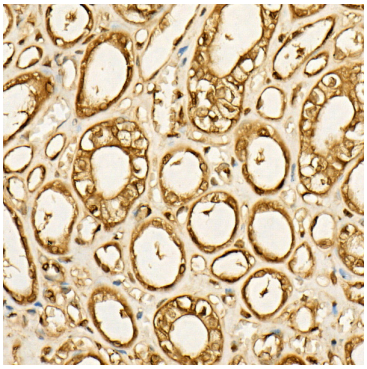
Validation Data



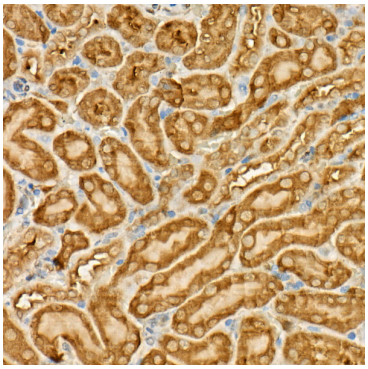
Western blot analysis of various lysates, using GAPDH Mouse mAb(High Dilution) antibody (AC033) at 1:640000 dilution.
Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 30s.



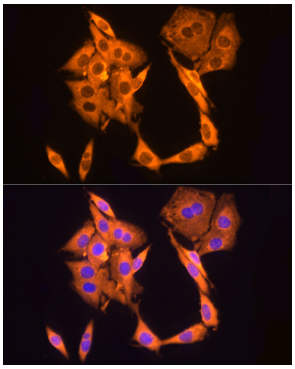
Western blot analysis of extracts of HeLa cells, using GAPDH antibody (AC033) at 1:10000-1:2560000 different dilution.
Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20s.



Immunohistochemistry analysis of paraffin-embedded human kidney using GAPDH Mouse mAb (High Dilution) (AC033) at dilution of 1:500 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded mouse kidney using GAPDH Mouse mAb (High Dilution) (AC033) at dilution of 1:500 (40x lens).Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunofluorescence analysis of PC-12 cells using GAPDH Mouse mAb (High Dilution) (AC033) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.