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GAPDH Polyclonal Antibody

(Catalog # A70921)

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.

Description
GAPDH Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation
Buffer: PBS with 0.01% thiomersal, 50% glycerol, pH7.3

Specificity
Human, Mouse, Rat

Isotype
IgG

Uniprot ID
P04406

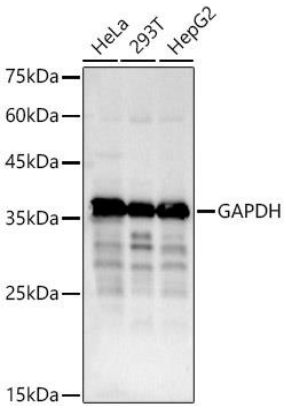
Purification
Affinity Purification

Immunogen
Recombinant fusion protein containing a sequence corresponding to amino acids 1-335 of human GAPDH (NP_002037.2).

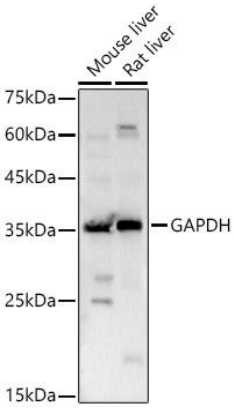
Storage
Shipped at 4°C. Upon receipt, store at -20°C. Avoid freeze / thaw cycles

Alternative Names
GAPDH; G3PD; GAPD; HEL-S-162eP; glyceraldehyde-3-phosphate dehydrogenase

Application
WB, IHC, IF, IP; Recommended dilution: WB 1:10000 - 1:30000, IHC-P 1:50 - 1:200, IF/ICC 1:50 - 1:200, IP 1:2000 - 1:20000



WB analysis of extracts of various cell lines, using GAPDH pAb at 1:30000 dilution. Secondary Ab: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug/lane. Blocking buffer: 3% nonfat dry milk in TBST.



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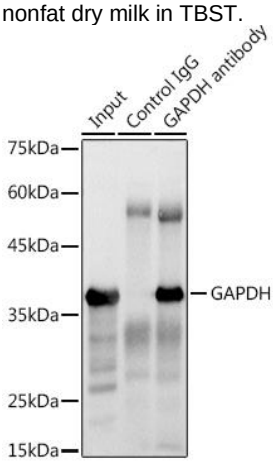
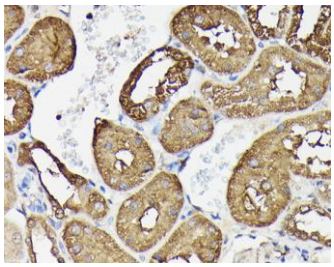
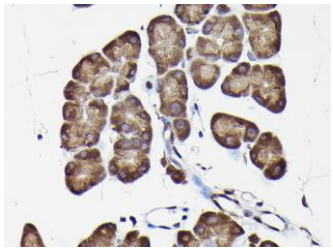
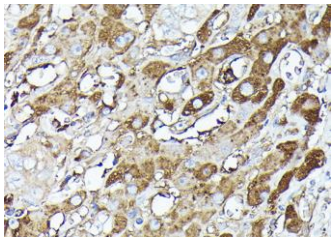
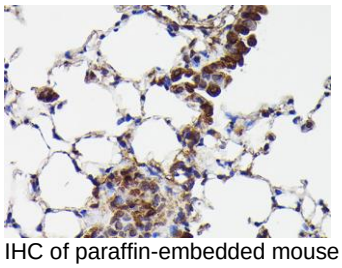


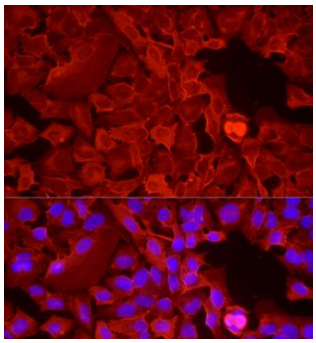
IP analysis of 300ug extracts of HeLa cells using 3ug pAb. WB dilution of 1:20000.

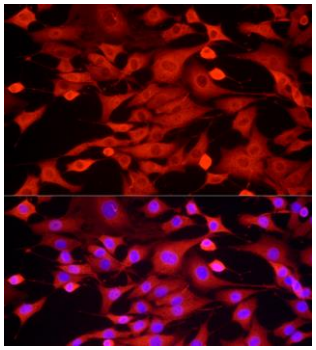

IHC of paraffin-embedded rat kidney using GAPDH pAb at dilution of 1:100 (40x lens). Performed high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.

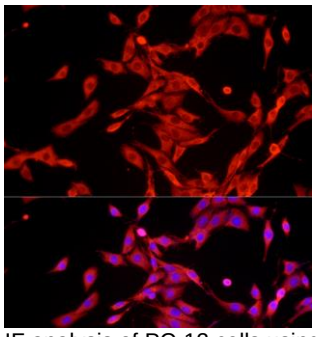

IHC of paraffin-embedded rat pancreas using GAPDH pAb at dilution of 1:100 (40x lens). Performed high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol

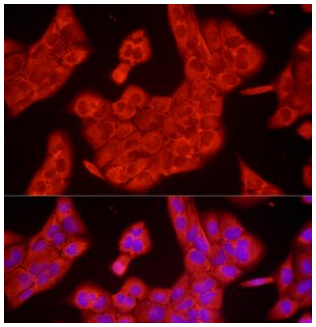

IHC of paraffin-embedded human liver cancer using GAPDH PAb at dilution of 1:100 (40x lens). Performed high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.


IHC of paraffin-embedded mouse lung using GAPDH pAb at dilution of 1:100 (40x lens). Performed high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.


IF analysis of HeLa cells using GAPDH pAb at dilution of 1:20 (40x lens). Blue: DAPI for nuclear staining.


IF analysis of NIH/3T3 cells using GAPDH pAb at dilution of 1:20 (40x lens). Blue: DAPI for nuclear staining.


IF analysis of PC-12 cells using GAPDH pAb at dilution of 1:20 (40x lens). Blue: DAPI for nuclear staining.


IF analysis of U2OS cells using GAPDH pAb at dilution of 1:20 (40x lens). Blue: DAPI for nuclear staining.