Product Name: KD-Validated GAPDH Rabbit Polyclonal Antibody
Catalog #: KVAb00598
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit pAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000
Molecular Weight	Calculated MW: 36.1kDa

Antigen Information

Gene Name	GAPDH
Alternative Names	GAPDH; Glyceraldehyde-3-Phosphate Dehydrogenase; GAPD; Peptidyl-Cysteine S-Nitrosylase GAPDH; EC 1.2.1.12; Epididymis Secretory Sperm Binding Protein Li 162eP; Oct1 Coactivator In S Phase, 38 Kd Component; Aging-Associated Gene 9 Protein; OCAS, P38 Component; HEL-S-162eP; EC 2.6.99.-; EC 1.2.1; G3PD
Gene ID	2597.0
SwissProt ID	P04406
Immunogen	A synthesized peptide derived from human GAPDH

Background

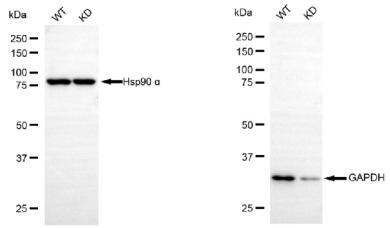
This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has

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. [provided by RefSeq, Nov 2014]

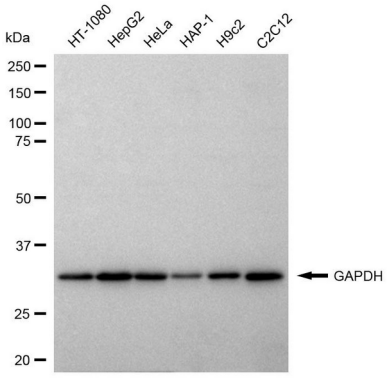
Research Area

Neuroscience,Isotype/Loading Controls,Signal Transduction,Cancer,Metabolism

Image Data



Western blotting analysis using GAPDH antibody (KVAb00598). GAPDH expression in wild type (WT) and GAPDH knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with GAPDH antibody (KVAb00598, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using GAPDH antibody (KVAb00598). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with GAPDH antibody (KVAb00598, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.