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GAPDHS Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8610c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O14556
Other Accession	Q4R3T1
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16542
Calculated MW	44501
Antigen Region	104-134

Additional Information

Gene ID	26330
Other Names	Glyceraldehyde-3-phosphate dehydrogenase, testis-specific, Spermatogenic cell-specific glyceraldehyde 3-phosphate dehydrogenase 2, GAPDH-2, Spermatogenic glyceraldehyde-3-phosphate dehydrogenase, GAPDHS, GAPD2, GAPDH2, GAPDS
Target/Specificity	This GAPDHS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 104-134 amino acids from the Central region of human GAPDHS.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GAPDHS Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GAPDHS

Synonyms	GAPD2, GAPDH2, GAPDS
Function	May play an important role in regulating the switch between different pathways for energy production during spermiogenesis and in the spermatozoon. Required for sperm motility and male fertility (By similarity).
Cellular Location	Cytoplasm.
Tissue Location	Testis specific.

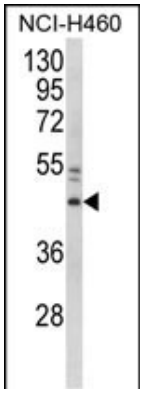
Background

GAPDHS is a protein belonging to the glyceraldehyde-3-phosphate dehydrogenase family of enzymes that play an important role in carbohydrate metabolism. Like its somatic cell counterpart, this sperm-specific enzyme functions in a nicotinamide adenine dinucleotide-dependent manner to remove hydrogen and add phosphate to glyceraldehyde 3-phosphate to form 1,3-diphosphoglycerate. During spermiogenesis, this enzyme may play an important role in regulating the switch between different energy-producing pathways, and it is required for sperm motility and male fertility.

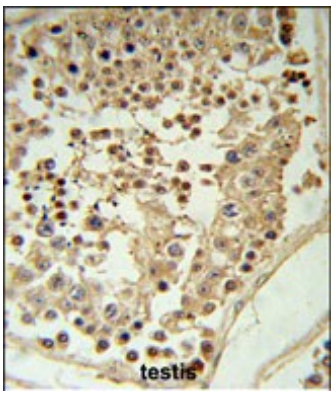
References

Welch,J.E., et.al., J. Androl. 21 (2), 328-338 (2000) Goodwin,L.O., et.al., Mol. Hum. Reprod. 6 (2), 127-136 (2000) Benham,F.J. et.al., Genomics 5 (2), 209-214 (1989)

Images

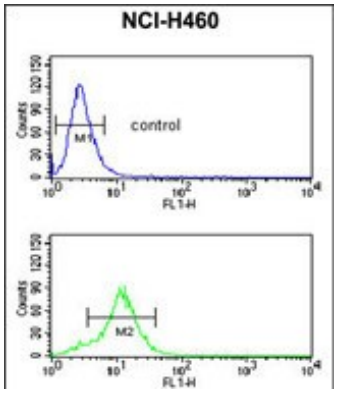


Western blot analysis of GAPDHS Antibody (Center) (Cat. #AP8610c) in NCI-H460 cell line lysates (35ug/lane). GAPDHS (arrow) was detected using the purified Pab.



GAPDHS Antibody (Center) (Cat. #AP8610c) IHC analysis in formalin fixed and paraffin embedded testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GAPDHS Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

GAPDHS Antibody (Center) (Cat. #AP8610c) flow cytometric analysis of NCI-H460 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Citations

- The effects of chemotherapy with bleomycin, etoposide, and cis-platinum (BEP) on rat sperm chromatin remodeling, fecundity and testicular gene expression in the progeny.
- Exposure to bleomycin, etoposide, and cis-platinum alters rat sperm chromatin integrity and sperm head protein profile.