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HHAT Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5503a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q5VTY9
Other Accession	NP_001116306.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27002
Calculated MW	57313
Antigen Region	30-59

Additional Information

Gene ID	55733
Other Names	Protein-cysteine N-palmitoyltransferase HHAT, 231-, Hedgehog acyltransferase, Melanoma antigen recognized by T-cells 2, MART-2, Skinny hedgehog protein 1, HHAT, MART2, SKI1
Target/Specificity	This HHAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 30-59 amino acids from the N-terminal region of human HHAT.
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 purified through a protein A column, followed by peptide affinity purification.
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	HHAT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HHAT {ECO:0000303|PubMed:18534984, ECO:0000312|HGNC:HGNC:18270}

Function	Palmitoyl acyltransferase that catalyzes N-terminal palmitoylation of hedgehog (DHH, IHH or SHH) morphogens, promoting their maturation (PubMed:11486055, PubMed:18534984, PubMed:24784881, PubMed:31875564, PubMed:34112694, PubMed:34890564). Promotes the transfer of palmitoyl-CoA from the cytoplasmic to the luminal side of the endoplasmic reticulum membrane, where hedgehog palmitoylation occurs (PubMed:31875564, PubMed:34112694, PubMed:34890564). Required for hedgehog signaling during limb development (By similarity). Plays a role in proper testis cord formation and the differentiation of Leydig cells (PubMed:24784881).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Note=Co-localizes with SHH in the ER and Golgi membrane
Tissue Location	Widely expressed. Expressed in fetal ovary and testis, with high levels of expression observed in Sertoli cells (PubMed:24784881).

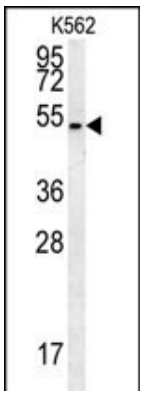
Background

'Skinny hedgehog' (SKI1) encodes an enzyme that acts within the secretory pathway to catalyze amino-terminal palmitoylation of 'hedgehog' (see MIM 600725).

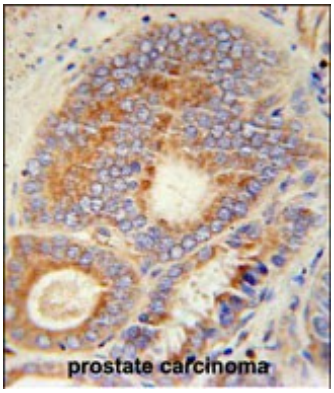
References

Chamoun, Z., et al. Science 293(5537):2080-2084(2001)
Kawakami, Y., et al. J. Immunol. 166(4):2871-2877(2001)

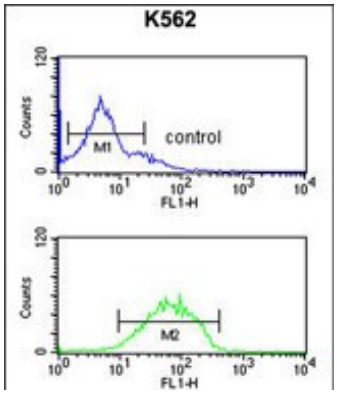
Images



HHAT Antibody (N-term) (Cat.#AP5503a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the HHAT antibody detected the HHAT protein (arrow).



HHAT Antibody (N-term) (Cat. #AP5503a) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HHAT Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



HHAT Antibody (N-term) (Cat. #AP5503a) flow cytometric analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.