10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

INHA Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6722A

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P05111
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18802
Calculated MW	39670
Antigen Region	79-108

Additional Information

Gene ID	3623
Other Names	Inhibin alpha chain, INHA
Target/Specificity	This INHA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 79-108 amino acids from the N-terminal region of human INHA.
Dilution	WB~~1:2000 IHC-P~~1:100~500 IF~~1:10~50 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	INHA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	INHA
Function	Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins/activins are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and

maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins. Inhibin B is a dimer of alpha and beta-B that plays a crucial role in the regulation of the reproductive system by inhibiting the secretion of follicle-stimulating hormone (FSH) from the anterior pituitary gland. Thereby, maintains reproductive homeostasis in both males and females. Acts as a more potent suppressor of FSH release than inhibin A (By similarity). Functions as competitive receptor antagonist binding activin type II receptors with high affinity in the presence of the TGF-beta type III coreceptor/TGFBR3L (PubMed:34910520).

Cellular Location Secreted {ECO:0000250|UniProtKB:P17490}.

Tissue Location Originally found in ovary (granulosa cells) and testis (Sertoli cells), but widely distributed in many tissues including brain and placenta. In adrenal cortex expression is limited to the zona reticularis and the innermost zona fasciculata in the normal gland, extending centripetally into the zona fasciculata in hyperplasia. Also found in adrenocortical tumors. Also expressed in prostate epithelium of benign prostatic hyperplasia, in regions of basal cell hyperplasia and in nonmalignant regions of high grade prostate cancer. Only circulating inhibin B is found in male, whereas circulating inhibins A and B are found in female

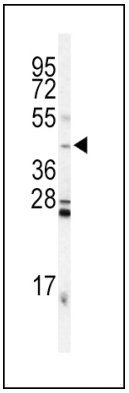
Background

The inhibin alpha subunit joins either the beta A or beta B subunit to form a pituitary FSH secretion inhibitor. Inhibin has been shown to regulate gonadal stromal cell proliferation negatively and to have tumour-suppressor activity. In addition, serum levels of inhibin have been shown to reflect the size of granulosa-cell tumors and can therefore be used as a marker for primary as well as recurrent disease. However, in prostate cancer, expression of the inhibin alpha-subunit gene was suppressed and was not detectable in poorly differentiated tumor cells. Furthermore, because expression in gonadal and various extragonadal tissues may vary severalfold in a tissue-specific fashion, it is proposed that inhibin may be both a growth/differentiation factor and a hormone.

References

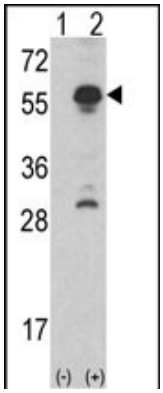
Balanathan,P., Br. J. Cancer 100 (11), 1784-1793 (2009)
Mason,A.J., Mol. Endocrinol. 10 (9), 1055-1065 (1996)

Images

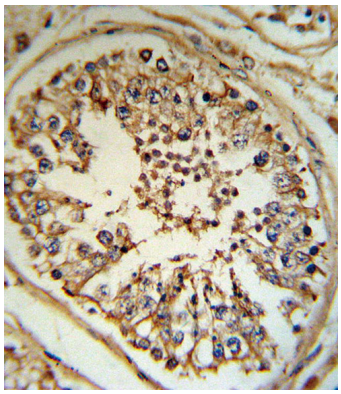


Western blot analysis of NHA Antibody (N-term)(Cat#AP6722a) in mouse testis tissue lysates (35ug/lane).NHA (arrow) was detected using the purified Pab.

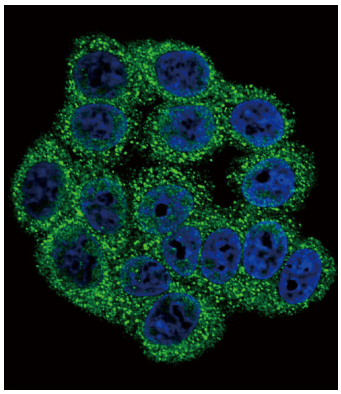
Western blot analysis of INHA(arrow) using rabbit



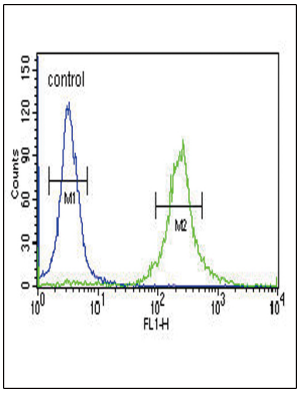
polyclonal INHA Antibody (N-term)(Cat#AP6722a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the INHA gene (Lane 2) (Origene Technologies).



INHA Antibody (N-term) (Cat#AP6722a) IHC analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the INHA Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of INHA Antibody (N-term)(Cat#AP6722a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



INHA Antibody (N-term) (Cat. #AP6722a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left 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'.