

Inhibin Alpha Rabbit pAb

Catalog # AP99539

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P05111
Other Accession	P05111
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Monkey, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39670
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Inhibin Alpha
Epitope Specificity	301-366/366
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the TGF-beta family.
SUBUNIT	Dimeric, linked by one or more disulfide bonds. Inhibin A is a dimer of alpha and beta-A. Inhibin B is a dimer of alpha and beta-B.
Post-translational modifications	Proteolytic processing yields a number of bioactive forms. The 20/23 kDa forms consist solely of the mature alpha chain, the 26/29 kDa forms consist of the most N-terminal propeptide linked through a disulfide bond to the mature alpha chain, the 50/53 kDa forms encompass the entire proprotein. Each type can be furthermore either mono- or diglycosylated, causing the mass difference.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	3623
Other Names	INHA_HUMAN; INHA; INHA_MOUSE; INHA_RAT; inhibin subunit alpha; inhibin, alpha

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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/TGFB3L (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

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