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INHA Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1465a

Specification

INHA Antibody - Product Information

Application	**WB, IF**
Primary Accession	P05111
Reactivity	**Human, Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**40kDa KDa**

Description
Inhibins are peptide hormones produced by the granulosa cells in female follicles and by Sertoli cells in the male seminiferous tubules. They are selectively expressed by cells of sex cord stromal derivation, and inhibit the secretion of follitropin by the pituitary gland. Inhibins are also involved in regulating 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, as inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibin has 2 subunits (alpha and beta) that are coded by separate genes. The alpha subunit determines whether inhibin or activin will be produced. The alpha subunit remains constant, such that the various types of inhibin are defined by the beta subunit (a,b,c,d). Inhibin A is a dimer of alpha and beta A. Inhibin B is a dimer of alpha and beta B. Proteolytic processing yields a number of inhibin alpha 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, and the 50/53 kDa forms encompass the entire proprotein. Each type can be furthermore either mono or diglycosylated, causing the mass difference.

Immunogen
Purified recombinant fragment of human INHA expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

INHA Antibody - Additional Information

Gene ID 3623

Other Names
Inhibin alpha chain, INHA

Dilution
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
INHA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

INHA Antibody - 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.

Cellular Location
Secreted.

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

INHA Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

INHA Antibody - Images

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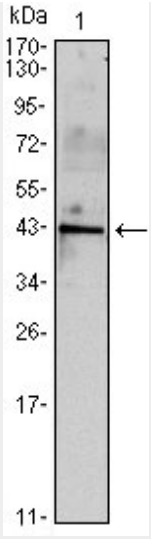


Figure 1: Western blot analysis using INHA mouse mAb against mouse spermary (1) tissues lysate.

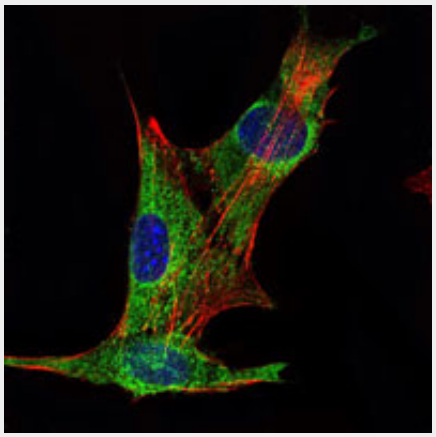


Figure 2: Immunofluorescence analysis of PANC-1 cells using INHA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

INHA Antibody - References

1. Cancer Epidemiol Biomarkers Prev. 2008 Dec;17(12):3567-72. 2. Acta Histochem. 2009;111(4):360-5. 3. Hum Reprod. 2009 Aug;24(8):2023-8.