

INHA (Inhibin alpha) Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1084a

Specification

INHA (Inhibin alpha) Antibody - Product Information

Application IHC, ICC, E
Primary Accession P05111
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 40kDa KDa

Description

INHA (A-inhibin subunit precursor, inhibin alpha subunit), also called inhibin (alpha), which is located on chromosome 2q33-q36. Inhibin is a gonadal protein that preferentially suppresses the secretion of pituitary follicle-stimulating hormone (FSH). Inhibin comprises of two subunits, Inhibin A and B. Inhibin has been shown to regulate gonadal stromal cell proliferation negatively and to have tumor 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. In addition to their role in endocrine feedback in the reproductive sytem, inhibins subserve local regulatory roles in numerous extragonadal tissues, including brain, adrenal, bone marrow, placenta, and most notably anterior pituitary. Inhibin alpha subunit gene expression is down regulated in human prostate cancer, suggesting a tumor suppressive role.

Immunogen

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

Formulation

Ascitic fluid containing 0.03% sodium azide.

INHA (Inhibin alpha) Antibody - Additional Information

Gene ID 3623

Other Names

Inhibin alpha chain, INHA

Dilution

IHC~~1/200 - 1/1000

ICC~~N/A

E~~N/A

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 (Inhibin alpha) Antibody is for research use only and not for use in diagnostic or therapeutic



procedures.

INHA (Inhibin alpha) 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. 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:https://www.uniprot.org/citations/34910520 target="_blank">34910520/a>).

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

INHA (Inhibin alpha) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

INHA (Inhibin alpha) Antibody - Images



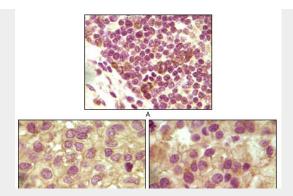


Figure 1: Immunohistochemical analysis of paraffin-embedded human lymphoid (A), ovary tumor (B) and testicle tumor (C) tissues using INHA mouse mAb with DAB staining.

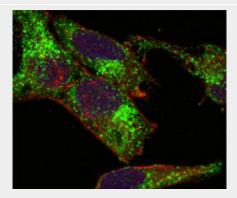


Figure 2: Confocal immunofluorescence analysis of Hela cells using INHA mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

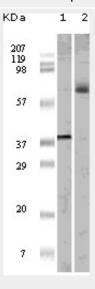


Figure 1: Western blot analysis using ELK1 mouse mAb against truncated ELK1 recombinant protein (1) and K562 cell lysate (2).

INHA (Inhibin alpha) Antibody - References

1. Mayo, K.E., Cerelli, G.M., Spiess, J., et al. 1986. Proc. Natl. Acad. Sci. USA 83: 5849-5853. 2. GM LM, WF Crowley, Jr, AL Schneyer.1995.J. Clin. Endocrinol. Metab., Oct . 80:3043-3049. 3. Knight, P.G. 1996.Front. Neuroendocrinol. 17: 476-509. 4. PA Fahy, CA Wilson, AJ Beard, et al. 1995.J Endocrinol Nov.147:271-283.