

Inhibin β -A (H-120): sc-50288

BACKGROUND

The TGF β superfamily is composed of numerous growth and differentiation factors, including transforming growth factor β (TGF β) 1, 2 and 3; growth/differentiation factor (GDF) 1 through 8; Mullerian inhibiting substance (MIS); bone morphogenic protein (BMP) 2 through 8; glial cell line-derived neurotrophic factor (GDNF); Inhibins (α , β -A, β -B and β -C), Lefty and Nodal. Members of the TGF β superfamily are involved in embryonic development and adult tissue homeostasis. Inhibins and activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. Inhibins and activins are involved in regulating a number of 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. Activins oppose the functions of Inhibins. Inhibins are predominantly expressed in liver, uterus and ovary tissue. Inhibin A, a dimer of α and β -A, and Inhibin B, a dimer of α and β -B, have been shown to inhibit the secretion of follicle stimulating hormone. Inhibin β -C forms a homodimer and its expression is predominant in adult liver.

CHROMOSOMAL LOCATION

Genetic locus: INHBA (human) mapping to 7p14.1, INHBB (human) mapping to 2q14.2; Inhba (mouse) mapping to 13 A1, Inhbb (mouse) mapping to 1 E2.3.

SOURCE

Inhibin β -A (H-120) is a rabbit polyclonal antibody raised against amino acids 307-426 mapping at the C-terminus of Inhibin β -A of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Inhibin β -A (H-120) is recommended for detection of precursor and mature Inhibin β -A, and to a lesser extent, Inhibin β -B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Inhibin β -A (H-120) is also recommended for detection of precursor and mature Inhibin β -A, and to a lesser extent, Inhibin β -B in additional species, including equine, canine, bovine, porcine and avian.

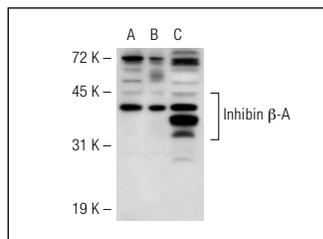
Molecular Weight of Inhibin β -A: 40-47 kDa.

Positive Controls: mouse testis extract: sc-2405, Inhibin β -A (m): 293T Lysate: sc-121067 or A549 cell lysate: sc-2413.

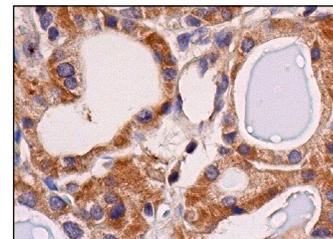
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Inhibin β -A (H-120): sc-50288. Western blot analysis of Inhibin β -A expression in non-transfected 293T: sc-117752 (A), mouse Inhibin β -A transfected 293T: sc-121067 (B) and A549 (C) whole cell lysates.



Inhibin β -A (H-120): sc-50288. Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Kempisty, B., et al. 2012. Expression and cellular distribution of INHA and INHB before and after *in vitro* cultivation of porcine oocytes isolated from follicles of different size. J. Biomed. Biotechnol. 2012: 742829.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
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Try **Inhibin β -A (E-1): sc-166503**, our highly recommended monoclonal alternative to Inhibin β -A (H-120).