SANTA CRUZ BIOTECHNOLOGY, INC.

Inhibin α (T-17): sc-22048



BACKGROUND

Inhibin is a gonadal protein that preferentially suppresses the secretion of pituitary follicle-stimulating hormone (FSH). Inhibin comprises two subunits, Inhibin A and Inhibin B. Each subunit consists of the same α subunit, covalently linked to one of two distinct subunits, β - α or β - β . Originally isolated from ovarian follicular fluid and characterized as a disulphide-linked dimeric glycoprotein, inhibin belongs to the transforming growth factor β (TFG β) superfamily of growth and differentiation factors. TFG β proteins affect a range of tissues and systems beyond their role in reproduction. 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 α subunit gene expression is downregulated in human prostate cancer, suggesting a tumor-suppressive role. The human Inhibin α gene maps to chromosome 2q35.

CHROMOSOMAL LOCATION

Genetic locus: INHA (human) mapping to 2q35; Inha (mouse) mapping to 1 C4.

SOURCE

Inhibin α (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Inhibin α of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-22048 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Inhibin α (T-17) is recommended for detection of precursor and mature chain of Inhibin α 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Inhibin α (T-17) is also recommended for detection of precursor and mature chain of Inhibin α in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Inhibin α siRNA (h): sc-39781, Inhibin α siRNA (m): sc-39782, Inhibin α shRNA Plasmid (h): sc-39781-SH, Inhibin α shRNA Plasmid (m): sc-39782-SH, Inhibin α shRNA (h) Lentiviral Particles: sc-39781-V and Inhibin α shRNA (m) Lentiviral Particles: sc-39782-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA





Inhibin α expression in non-transfected (**A**) and human Inhibin α transfected (**B**) CHO whole cell lysates.

Inhibin α (T-17): sc-22048. Western blot analysis of Inhibin α expression in non-transfected: sc-117750 (A) and human Inhibin α transfected: sc-110086 (B) CHO whole cell lysates.

SELECT PRODUCT CITATIONS

- Kamei, Y., et al. 2005. A steroidogenic cell line with differentiation potential from mouse granulosa cells, transfected with Ad4BP and SV40 large T antigen genes. J. Endocrinol. 185: 187-195.
- da Silveira, J.C., et al. 2012. Cell-secreted vesicles in equine ovarian follicular fluid contain miRNAs and proteins: a possible new form of cell communication within the ovarian follicle. Biol. Reprod. 86: 71.
- 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.

Molecular Weight of Inhibin α : 47 kDa.