SANTA CRUZ BIOTECHNOLOGY, INC.

Inhibin β-B (C-18): sc-6306

BACKGROUND

The TGFβ superfamily is composed of numerous growth and differentiation factors, including transforming growth factor β (TGFβ) 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 TGFβ 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 funtions 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: INHBB (human) mapping to 2q14.2; Inhbb (mouse) mapping to 1 E2.3.

SOURCE

Inhibin β-B (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Inhibin β-B 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-6306 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Inhibin β-B (C-18) is recommended for detection of 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 µg per 100-500 µg 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-B (C-18) is also recommended for detection of Inhibin β-B in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for Inhibin β-B siRNA (h): sc-43861, Inhibin β-B siRNA (m): sc-39786, Inhibin β-B shRNA Plasmid (h): sc-43861-SH, Inhibin β-B shRNA Plasmid (m): sc-39786-SH, Inhibin β-B shRNA (h) Lentiviral Particles: sc-43861-V and Inhibin β-B shRNA (m) Lentiviral Particles: sc-39786-V.

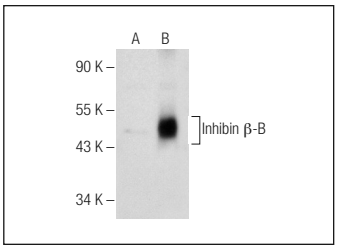
Molecular Weight of Inhibin β-B: 45 kDa.

Positive Controls: Inhibin β-B (h): 293T Lysate: sc-159290.

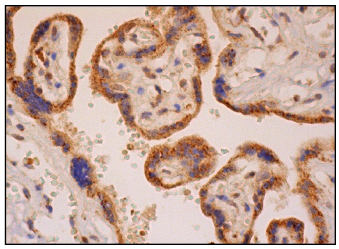
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Inhibin β-B (C-18): sc-6306. Western blot analysis of Inhibin β-B expression in non-transfected: sc-117752 (**A**) and human Inhibin β-B transfected: sc-159290 (**B**) 293T whole cell lysates.



Inhibin β-B (C-18): sc-6306. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells.

SELECT PRODUCT CITATIONS

1. Mao, X., et al. 2009. GCN5 is a required cofactor for a ubiquitin ligase that targets NFκB/RelA. Genes Dev. 23: 849-861.

STORAGE

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

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.