SANTA CRUZ BIOTECHNOLOGY, INC.

Inhibin β-B (H-110): sc-50287

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

REFERENCES

1. Stewart, A.G., et al. 1986. Human Inhibin genes. Genomic characterization and sequencing. FEBS Lett. 206: 329-334.
2. Mayo, K.E., et al. 1986. Inhibin A-subunit cDNAs from porcine ovary and human placenta. Proc. Natl. Acad. Sci. USA 83: 5849-5853.
3. Massague, J., et al. 1987. Multiple type-β transforming growth factors and their receptors. J. Cell. Physiol. 5: 43-47.
4. Massague, J. 1990. The transforming growth factor-β family. Ann. Rev. Cell Biol. 6: 597-641.
5. Albano, R.M., et al. 1993. Activins are expressed in preimplantation mouse embryos and in ES and EC cells and are regulated on their differentiation. Development 117: 711-723.
6. Schmitt, J., et al. 1996. Structure, chromosomal localization and expression analysis of the mouse Inhibin/activin β C (Inhβc) gene. Genomics 32: 358-366.

CHROMOSOMAL LOCATION

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

SOURCE

Inhibin β-B (H-110) is a rabbit polyclonal antibody raised against amino acids 298-407 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.

RESEARCH USE

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

APPLICATIONS

Inhibin β-B (H-110) is recommended for detection of Inhibin β-B and, to a lesser extent, Inhibin β-A 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Inhibin β-B (H-110) is also recommended for detection of Inhibin β-B and, to a lesser extent, Inhibin β-A in additional species, including bovine, porcine and avian.

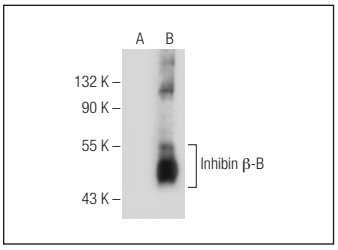
Molecular Weight of Inhibin β-B: 45 kDa.

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 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.

DATA



Inhibin β-B (H-110): sc-50287. 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.

STORAGE

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

MONOS Satisfaction Guaranteed

Try **Inhibin β-B (H-8): sc-376971** or **Inhibin β-B (B-9): sc-390959**, our highly recommended monoclonal alternatives to Inhibin β-B (H-110).