# Inhibin β-B (h): 293T Lysate: sc-159290



The Power to Question

### **BACKGROUND**

The TGFB 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 ( $\alpha$ ,  $\beta$ -A,  $\beta$ -B and  $\beta$ -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 functions of inhibins. Inhibins are predominantly expressed in liver, uterus and ovary tissue. Inhibin A, a dimer of  $\alpha$  and  $\beta$ -A, and inhibin B, a dimer of  $\alpha$  and  $\beta$ -B, have been shown to inhibit the secretion of follicle stimulating hormone. Inhibin  $\beta$ -C forms a homodimer and its expression is predominant in adult liver.

### **REFERENCES**

- Stewart, A.G., et al. 1986. Human inhibin genes. Genomic characterisation 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- $\beta$  transforming growth factors and their receptors. J. Cell. Physiol. Suppl. 5: 43-47.
- 4. Massague, J. 1990. The transforming growth factor-  $\beta$  family. Annu. 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.

# **CHROMOSOMAL LOCATION**

Genetic locus: INHBB (human) mapping to 2q14.2.

# **PRODUCT**

Inhibin  $\beta$ -B (h): 293T Lysate represents a lysate of human Inhibin  $\beta$ -B transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## **APPLICATIONS**

Inhibin  $\beta\text{-B}$  (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Inhibin  $\beta\text{-B}$  antibodies. Recommended use: 10-20  $\mu\text{I}$  per lane

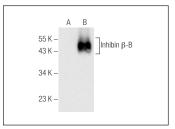
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

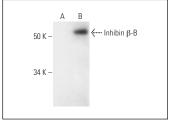
Inhibin  $\beta$ -B (H-8): sc-376971 is recommended as a positive control antibody for Western Blot analysis of enhanced human Inhibin  $\beta$ -B expression in Inhibin  $\beta$ -B transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

### **DATA**





Inhibin β-B (H-8): sc-376971. 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 Ivsates

Inhibin  $\beta$ -B (B-9): sc-390959. Western blot analysis of Inhibin  $\beta$ -B expression in non-transfected: sc-117752 (A) and human Inhibin  $\beta$ -B transfected: sc-159290 (B) 293T whole cell I vsates.

### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.