

Inhibin β -B (AC01Z): sc-73674

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.

REFERENCES

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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. 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.
6. Schmitt, J., et al. 1996. Structure, chromosomal localization and expression analysis of the mouse Inhibin/Activin β _C (Inh β _C) gene. Genomics 32: 358-366.
7. McPherron, A.C., et al. 1997. Regulation of skeletal muscle mass in mice by a new TGF β superfamily member. Nature 387: 83-90.

CHROMOSOMAL LOCATION

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

SOURCE

Inhibin β -B (AC01Z) is a mouse monoclonal antibody raised against full length recombinant Inhibin β -B of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer. Available azide-free for neutralization, sc-73674 L, 100 μ g/0.1 ml.

APPLICATIONS

Inhibin β -B (AC01Z) is recommended for detection of Inhibin β -B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Molecular Weight of Inhibin β -B monomer: 15 kDa.

Molecular Weight of Inhibin β -B homodimer: 25 kDa.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

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.