SANTA CRUZ BIOTECHNOLOGY, INC.

Inhibin α (h2): CHO Lysate: sc-110086

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-A or β-B. Originally isolated from ovarian follicular fluid and characterized as a disulphide-linked dimeric glycoprotein, Inhibin belongs to the transforming growth factor β (TFGβ) superfamily of growth and differentiation factors. TFGβ 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. Inhibin α gene maps to chromosome 2q35.

REFERENCES

1. Mayo, K.E., Cerelli, G.M., Spiess, J., Rivier, J., Rosenfeld, M.G., Evans, R.M. and Vale, W. 1986. Inhibin A-subunit cDNAs from porcine ovary and human placenta. Proc. Natl. Acad. Sci. USA 83: 5849-5853.
2. Kong, D.J. and Cheng, Z.P. 1995. Progress in the study of Inhibin subunit gene expression and regulation in mammalian ovary. Sheng Li Ke Xue Jin Zhan 26: 204-208.
3. Knight, P.G. 1996. Roles of inhibins, activins, and follistatin in the female reproductive system. Front. Neuroendocrinol. 17: 476-509.
4. Mather, J.P., Moore, A. and Li, R.H. 1997. Activins, inhibins, and follistatins: further thoughts on a growing family of regulators. Proc. Soc. Exp. Biol. Med. 215: 209-222.
5. Risbridger, G.P. and Cancilla, B. 2000. Role of activins in the male reproductive tract. Rev. Reprod. 5: 99-104.
6. Schmitt, J.F., Millar, D.S., Pedersen, J.S., Clark, S.L., Venter, D.J., Frydenberg, M., Molloy, P.L. and Risbridger, G.P. 2002. Hypermethylation of the Inhibin α subunit gene in prostate carcinoma. Mol. Endocrinol. 16: 213-220.
7. Online Mendelian Inheritance in Man, OMIM™. 2004. John Hopkins University, Baltimore, MD. MIM Number: 147380. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: INHA (human) mapping to 2q35.

PRODUCT

Inhibin α (h2): CHO Lysate represents a lysate of human Inhibin α transfected CHO cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

Inhibin α (h2): CHO Lysate is suitable as a Western Blotting positive control for human reactive Inhibin α antibodies. Recommended use: 10-20 µl per lane.

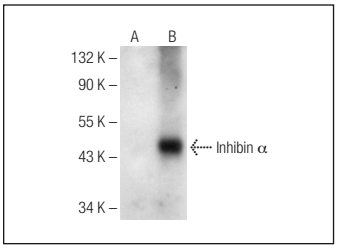
Control CHO Lysate: sc-117750 is available as a Western Blotting negative control lysate derived from non-tranfected CHO cells.

Inhibin α (D-4): sc-365439 is recommended as a positive control antibody for Western Blot analysis of enhanced human Inhibin α expression in Inhibin α transfected CHO 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-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Inhibin α (D-4): sc-365439. 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.

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.