

Inhibin α (G-14): sc-22047

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 - α or β - β . Originally isolated from ovarian follicular fluid and characterized as a disulphide-linked dimeric glycoprotein, inhibin belongs to the transforming growth factor β (TFG β) superfamily of growth and differentiation factors. TFG β proteins affect a range of tissues and systems beyond their role in reproduction. In addition to their role in endocrine feedback in the reproductive system, 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. The Inhibin α maps to chromosome 2q33-qter.

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.

CHROMOSOMAL LOCATION

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

SOURCE

Inhibin α (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Inhibin α of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-22047 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Inhibin α (G-14) is recommended for detection of precursor and mature chain of Inhibin α of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for Inhibin α siRNA (h): sc-39781, Inhibin α shRNA Plasmid (h): sc-39781-SH and Inhibin α shRNA (h) Lentiviral Particles: sc-39781-V.

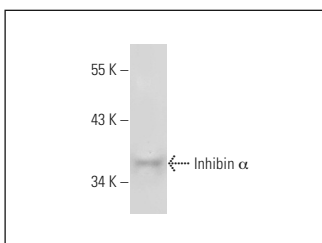
Molecular Weight of Inhibin α : 47 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181.

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.

DATA



Inhibin α (G-14): sc-22047. Western blot analysis of Inhibin α expression in NTERA-2 cl.D1 whole cell lysate.

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.



Try **Inhibin α (D-4): sc-365439**, our highly recommended monoclonal alternative to Inhibin α (G-14).