SANTA CRUZ BIOTECHNOLOGY, INC.

# Inhibin α (H-134): sc-30146

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-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 (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. The Inhibin α maps to chromosome 2q35.

## REFERENCES


1. Mayo, K.E., et al. 1986. Inhibin A subunit cDNAs from porcine ovary and human placenta. Proc. Natl. Acad. Sci. USA 83: 5849-5853.
2. Kong, D.J., et al. 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., et al. 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., et al. 2000. Role of activins in the male reproductive tract. Rev. Reprod. 5: 99-104.
6. Schmitt, J.F., et al. 2002. Hypermethylation of the Inhibin α subunit gene in prostate carcinoma. Mol. Endocrinol. 16: 213-220.
7. Online Mendelian Inheritance in Man, OMIM™. 2002. 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; Inha (mouse) mapping to 1 C4.

## SOURCE

Inhibin α (H-134) is a rabbit polyclonal antibody raised against amino acids 233-366 mapping at the C-terminus of Inhibin α 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.

## STORAGE

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

## APPLICATIONS

Inhibin α (H-134) is recommended for detection of precursor and mature chain of Inhibin α 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

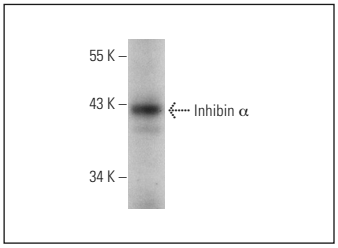
Inhibin α (H-134) is also recommended for detection of precursor and mature chain of Inhibin α in additional species, including equine and bovine.

Suitable for use as control antibody for Inhibin α siRNA (h): sc-39781, Inhibin α siRNA (m): sc-39782, Inhibin α shRNA Plasmid (h): sc-39781-SH, Inhibin α shRNA Plasmid (m): sc-39782-SH, Inhibin α shRNA (h) Lentiviral Particles: sc-39781-V and Inhibin α shRNA (m) Lentiviral Particles: sc-39782-V.

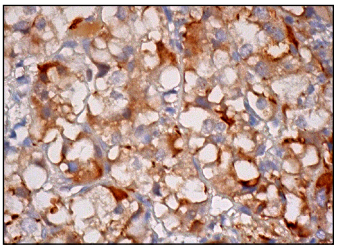
Molecular Weight of Inhibin α: 47 kDa.

Positive Controls: mouse testis extract: sc-2405.

## DATA




Inhibin α (H-134): sc-30146. Western blot analysis of Inhibin α expression in mouse testis tissue extract.



Inhibin α (H-134): sc-30146. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

## RESEARCH USE

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

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.