SANTA CRUZ BIOTECHNOLOGY, INC.

follistatin (K-19): sc-23553

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Follistatin is a high affinity binding protein of Activin originally isolated for its role in regulating the release of follicle-stimulating hormone (FSH). Follistatin forms a group of interrelated factors with Activins and inhibins, members of the transforming growth factor β (TGFβ) superfamily. Activin, follistatin and Activin receptors are expressed in many tissues, where they function as autocrine/paracrine regulators of a variety of physiological processes including reproduction. Follistatin is an important regulator of pituitary FSH secretion.

REFERENCES

1. Keutmann, H.T., et al. 2004. The role of follistatin domains in follistatin biological action. Mol. Endocrinol. 18: 228-240.
2. Hurwitz, J.M., et al. 2004. Inhibins, Activins, and follistatin in the aging female and male. Semin. Reprod. Med. 22: 209-217.
3. Schneyer, A., et al. 2004. Differential actions of follistatin and follistatin-like 3. Mol. Cell. Endocrinol. 225: 25-28.
4. Bilezikjian, L.M., et al. 2004. Autocrine/paracrine regulation of pituitary function by Activin, inhibin and follistatin. Mol. Cell. Endocrinol. 225: 29-36.
5. Muttukrishna, S., et al. 2004. Activin and follistatin in female reproduction. Mol. Cell. Endocrinol. 225: 45-56.
6. de Kretser, D.M., et al. 2004. The role of Activin, follistatin and inhibin in testicular physiology. Mol. Cell. Endocrinol. 225: 57-64.

CHROMOSOMAL LOCATION

Genetic locus: FST (human) mapping to 5q11.2; Fst (mouse) mapping to 13 D2.2.

SOURCE

follistatin (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of follistatin 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.

Blocking peptide available for competition studies, sc-23553 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

PROTOCOLS

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

APPLICATIONS

follistatin (K-19) is recommended for detection of follistatin 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

follistatin (K-19) is also recommended for detection of follistatin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for follistatin siRNA (h): sc-39762, follistatin siRNA (m): sc-39763, follistatin shRNA Plasmid (h): sc-39762-SH, follistatin shRNA Plasmid (m): sc-39763-SH, follistatin shRNA (h) Lentiviral Particles: sc-39762-V and follistatin shRNA (m) Lentiviral Particles: sc-39763-V.

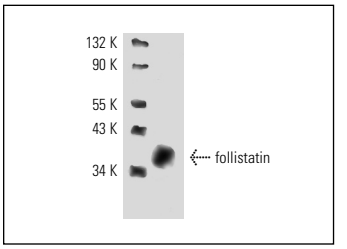
Molecular Weight of follistatin: 35-70 kDa.

Positive Controls: Mouse recombinant follistatin.

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



follistatin (K-19): sc-23553. Western blot analysis of mouse recombinant follistatin.

SELECT PRODUCT CITATIONS

1. Hiroki, E., et al. 2011. A comparative study of myostatin, follistatin and decorin expression in muscle of different origin. Anat. Sci. Int. 86: 151-159.
2. Gerhart, J., et al. 2011. Myo/Nog cell regulation of bone morphogenetic protein signaling in the blastocyst is essential for normal morphogenesis and striated muscle lineage specification. Dev. Biol. 359: 12-25.