SANTA CRUZ BIOTECHNOLOGY, INC.

follistatin (H-114): sc-30194

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.

CHROMOSOMAL LOCATION

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

SOURCE

follistatin (H-114) is a rabbit polyclonal antibody raised against amino acids 231-344 mapping at the C-terminus 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.

APPLICATIONS

follistatin (H-114) is recommended for detection of follistatin isoforms 1-3 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 (H-114) is also recommended for detection of follistatin isoforms 1-3 in additional species, including equine, canine, bovine, porcine and avian.

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.

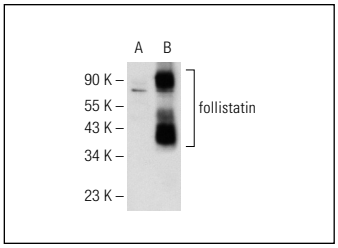
Molecular Weight of follistatin: 35-70 kDa.

Positive Controls: follistatin (h): 293T Lysate: sc-159980 or mouse recombinant follistatin.

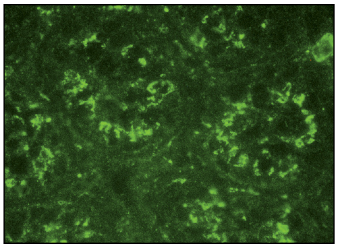
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



follistatin (H-114): sc-30194. Western blot analysis of follistatin expression in non-transfected: sc-117752 (**A**) and human follistatin transfected: sc-159980 (**B**) 293T whole cell lysates.



follistatin (H-114): sc-30194. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

1. Lima, A.R., et al. 2010. Myostatin and follistatin expression in skeletal muscles of rats with chronic heart failure. Int. J. Exp. Pathol. 91: 54-62.
2. Gao, X., et al. 2010. Nucleolar follistatin promotes cancer cell survival under glucose-deprived conditions through inhibiting cellular rRNA synthesis. J. Biol. Chem. 285: 36857-36864.
3. Shtilbans, A., et al. 2011. Differential gene expression in patients with amyotrophic lateral sclerosis. Amyotroph. Lateral Scler. 12: 250-256.
4. Damatto, R.L., et al. 2013. Heart failure-induced skeletal myopathy in spontaneously hypertensive rats. Int. J. Cardiol. 167: 698-703.

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.