

follistatin (C-8): sc-365003

BACKGROUND

Follistatin is a high affinity binding protein of activin originally isolated for their 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 (TGF β) 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.

CHROMOSOMAL LOCATION

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

SOURCE

follistatin (C-8) is a mouse monoclonal antibody raised against amino acids 231-344 mapping at the C-terminus of follistatin of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

follistatin (C-8) is available conjugated to agarose (sc-365003 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365003 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365003 PE), fluorescein (sc-365003 FITC), Alexa Fluor[®] 488 (sc-365003 AF488), Alexa Fluor[®] 546 (sc-365003 AF546), Alexa Fluor[®] 594 (sc-365003 AF594) or Alexa Fluor[®] 647 (sc-365003 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365003 AF680) or Alexa Fluor[®] 790 (sc-365003 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

follistatin (C-8) is recommended for detection of follistatin isoforms 1-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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 COLO 205 whole cell lysate: sc-364117.

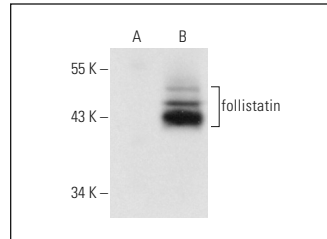
STORAGE

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

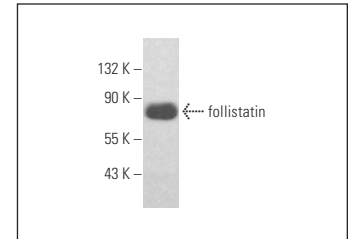
RESEARCH USE

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

DATA



follistatin (C-8): sc-365003. Western blot analysis of follistatin expression in non-transfected: sc-117752 (A) and human follistatin transfected: sc-159980 (B) 293T whole cell lysates.



follistatin (C-8): sc-365003. Western blot analysis of follistatin expression in COLO 205 whole cell lysate.

SELECT PRODUCT CITATIONS

- Wallner, C., et al. 2018. Interaction with the GDF8/11 pathway reveals treatment options for adenocarcinoma of the breast. *Breast* 37: 134-141.
- Wallner, C., et al. 2019. Myostatin upregulation in patients in the chronic phase of severe burn injury leads to muscle cell catabolism. *Eur. Surg. Res.* 60: 86-96.
- Han, X., et al. 2019. Mechanisms involved in follistatin-induced hypertrophy and increased Insulin action in skeletal muscle. *J. Cachexia Sarcopenia Muscle* 10: 1241-1257.
- Faraoni, E.Y., et al. 2020. Activin-inhibitory action on lactotrophs is decreased in lactotroph hyperplasia. *J. Endocrinol.* 244: 415-429.
- Baik, S.H., et al. 2021. Hippocampal transcriptome profiling reveals common disease pathways in chronic hypoperfusion and aging. *Aging* 13: 14651-14674.
- Webb, B.M., et al. 2021. TGF- β /activin signaling promotes CDK7 inhibitor resistance in triple negative breast cancer cells through upregulation of multidrug transporters. *J. Biol. Chem.* 297: 101162.
- Li, K., et al. 2021. Metallothionein-1G suppresses pancreatic cancer cell stemness by limiting activin A secretion via NF κ B inhibition. *Theranostics* 11: 3196-3212.
- Melendez, J., et al. 2021. TGF β signalling acts as a molecular brake of myoblast fusion. *Nat. Commun.* 12: 749.
- Miao, X., et al. 2022. Epiprofin transcriptional activation promotes ameloblast induction from mouse induced pluripotent stem cells via the BMP-smad signaling axis. *Front. Bioeng. Biotechnol.* 10: 890882.

PROTOCOLS

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

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