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Follistatin Antibody

Rabbit mAb
Catalog # AP91458

Product Information

Application	WB
Primary Accession	P19883
Reactivity	Rat, Human
Clonality	Monoclonal
Other Names	Activin binding protein; Follistatin; FS; fst; Human follistatin gene;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	38007

Additional Information

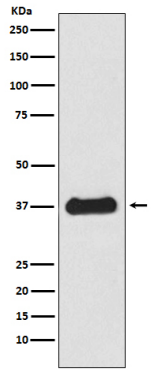
Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Follistatin
Description	Binds directly to activin and functions as an activin antagonist. Specific inhibitor of the biosynthesis and secretion of pituitary follicle stimulating hormone (FSH).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	FST (HGNC:3971)
Function	Multifunctional regulatory protein whose primary function is to antagonize members of the transforming growth factor beta (TGF-beta) superfamily including activin, myostatin, GDF11 or bone morphogenetic proteins (BMPs) (PubMed:11279126, PubMed:16482217, PubMed:18535106). Mechanistically, binds to these ligands in the extracellular space, blocking their type II receptor-binding site to inhibit downstream signaling (PubMed:16482217). Plays an essential role in muscle fiber formation and growth both by preventing the repressive effects of myostatin and through SMAD3/AKT/mTOR signaling independently of myostatin (By similarity). Also promotes neural differentiation by antagonizing the action BMP4 (By similarity). Acts as a specific inhibitor of the biosynthesis and secretion of pituitary follicle stimulating hormone (FSH) by sequestering activin A/INHBA (PubMed:11279126). On the other hand, translocates into the nucleus where it down-regulates rRNA synthesis and ribosome biogenesis to maintain cellular energy homeostasis by binding to rDNA.

Cellular Location	Secreted. Nucleus, nucleolus
Tissue Location	Isoform 1 is the predominant isoform in serum but is undetectable in follicular fluid. In the embryo, strong expression is seen in the palatal epithelia, including the medial edge epithelial and midline epithelial seam of the palatal shelves. Less pronounced expression is also seen throughout the palatal shelf and tongue mesenchyme (PubMed:31215115).

Images



Western blot analysis of Follistatin expression in HepG2 cell lysate.

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