

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

A synthesized peptide derived from human Follistatin **Immunogen**

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.

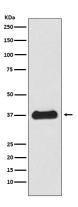
Cellular Location

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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