

Follistatin Antibody

Rabbit mAb Catalog # AP91458

Specification

Follistatin Antibody - Product Information

Application WB
Primary Accession P19883
Reactivity Rat

Clonality Monoclonal

Other Names

Activin binding protein; Follistatin; FS; fst; Human follistatin gene;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 38007 Da

Follistatin Antibody - Additional Information

Dilution WB~~1:1000

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.

Follistatin Antibody - 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 LocationSecreted. Nucleus, nucleolus

Tissue Location

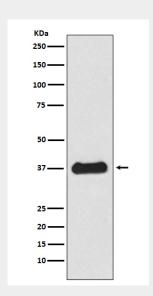
Isoform 1 is the predominant isoform in serum but is undetectable in follicular fluid. In the embryo, strong expression is seen in the palatal epithelia, including the medial edge epithelial and midline epithelial seam of the palatal shelves. Less pronounced expression is also seen throughout the palatal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

Follistatin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Follistatin Antibody - Images



Western blot analysis of Follistatin expression in HepG2 cell lysate.