

Follistatin Rabbit mAb

Catalog # AP75448

Product Information

ApplicationWBPrimary AccessionP19883ReactivityRatHostRabbit

Clonality Monoclonal Antibody

Calculated MW 38007

Additional Information

Gene ID 10468

Other Names FST

Dilution WB~~1/500-1/1000

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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:<u>11279126</u>). 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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.