

#### Follistatin Rabbit mAb

Catalog # AP75448

# **Specification**

#### Follistatin Rabbit mAb - Product Information

**Application WB** P19883 **Primary Accession** Reactivity Rat Host Rabbit

Clonality **Monoclonal Antibody** 

Calculated MW 38007

#### Follistatin Rabbit mAb - 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.

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

#### Follistatin Rabbit mAb - 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:<a

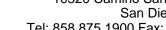
href="http://www.uniprot.org/citations/11279126" target="\_blank">11279126</a>, PubMed:<a href="http://www.uniprot.org/citations/16482217" target="\_blank">16482217</a>, PubMed:<a href="http://www.uniprot.org/citations/18535106" target="\_blank">18535106</a>).

Mechanistically, binds to these ligands in the extracellular space, blocking their type II

receptor-binding site to inhibit downstream signaling (PubMed: <a

href="http://www.uniprot.org/citations/16482217" target=" blank">16482217</a>). 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:<a href="http://www.uniprot.org/citations/11279126" target="\_blank">11279126</a>). 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).

## Follistatin Rabbit mAb - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Follistatin Rabbit mAb - Images

