

Follistatin Polyclonal Antibody

Catalog # AP69918

Specification

Follistatin Polyclonal Antibody - Product Information

Application WB, IHC-P **Primary Accession** P19883

Reactivity Human, Mouse, Rat

Host Rabbit Clonality **Polyclonal**

Follistatin Polyclonal Antibody - Additional Information

Gene ID 10468

Other Names

FST; Follistatin; FS; Activin-binding protein

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Follistatin Polyclonal 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:<a

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



target="_blank">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

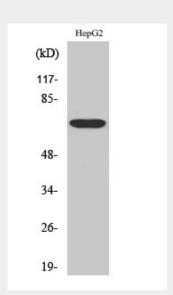
Isoform 1 is the predominant isoform in serum but is undetectable in follicular fluid. In the embryo, strong expression is seen in the palatal epithelia, including the medial edge epithelial and midline epithelial seam of the palatal shelves. Less pronounced expression is also seen throughout the palatal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

Follistatin Polyclonal Antibody - Protocols

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

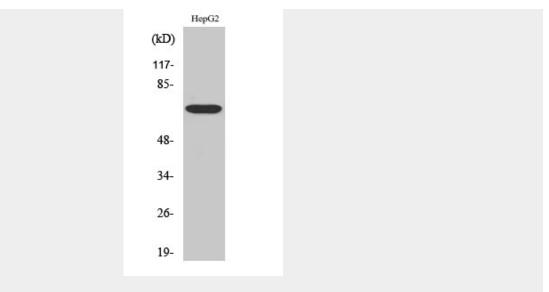
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Follistatin Polyclonal Antibody - Images



Western Blot analysis of various cells using Follistatin Polyclonal Antibody diluted at 1□500





Western Blot analysis of various cells using Follistatin Polyclonal Antibody diluted at 1□500

Follistatin Polyclonal Antibody - Background

Binds directly to activin and functions as an activin antagonist. Specific inhibitor of the biosynthesis and secretion of pituitary follicle stimulating hormone (FSH).