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# FST Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP14597B**

## Specification

### FST Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | P19883 |
| Other Accession | P10669, Q90844, P50291, NP_006341.1, NP_037541.1, O62650, P31514 |
| Reactivity | **Human** |
| Predicted | **Bovine, Chicken, Horse, Pig, Sheep** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **38007** |
| Antigen Region | **312-340** |

### FST Antibody (C-term) - Additional Information

**Gene ID** 10468

**Other Names**
Follistatin, FS, Activin-binding protein, FST

**Target/Specificity**
This FST antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 312-340 amino acids from the C-terminal region of human FST.

**Dilution**
WB~~1:1000
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
FST Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### FST Antibody (C-term) - 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

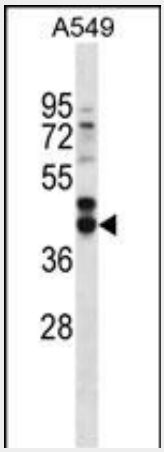
**Tissue Location**
Isoform 1 is the predominant isoform in serum but is undetectable in follicular fluid. In the embryo, strong expression is seen in the palatal epithelia, including the medial edge epithelial and midline epithelial seam of the palatal shelves. Less pronounced expression is also seen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

## FST Antibody (C-term) - 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

## FST Antibody (C-term) - Images




FST Antibody (C-term) (Cat. #AP14597b) western blot analysis in A549 cell line lysates

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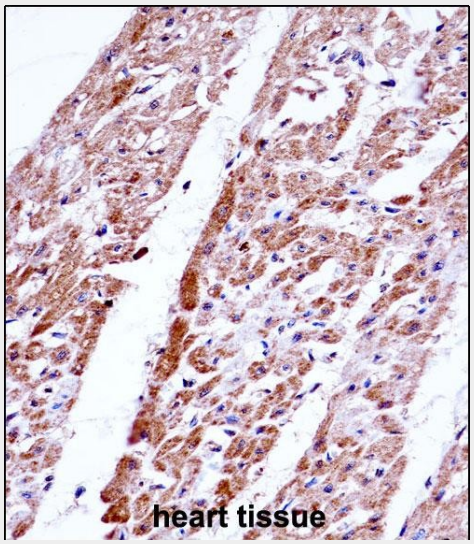
(35ug/lane).This demonstrates the FST antibody detected the FST protein (arrow).




FST Antibody (C-term) (AP14597b)immunohistochemistry analysis in formalin fixed and paraffin embedded human heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of FST Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

**FST Antibody (C-term) - Background**

Follistatin is a single-chain gonadal protein that specifically inhibits follicle-stimulating hormone release. The single FST gene encodes two isoforms, FST317 and FST344 containing 317 and 344 amino acids respectively, resulting from alternative splicing of the precursor mRNA. In a study in which 37 candidate genes were tested for linkage and association with polycystic ovary syndrome (PCOS) or hyperandrogenemia in 150 families, evidence was found for linkage between PCOS and follistatin. [provided by RefSeq].

**FST Antibody (C-term) - References**

Chen, M.J., et al. Hum. Reprod. 25(3):779-785(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
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Fajardo, M., et al. Clin. Orthop. Relat. Res. 467(12):3071-3078(2009)
Bloise, E., et al. BMC Cancer 9, 320 (2009) :