

## Human CellExp Follistatin, human recombinant protein

Follistatin, FS, FST Catalog # PBV10857r

#### **Specification**

## Human CellExp Follistatin, human recombinant protein - Product info

Primary Accession <u>P19883</u>

Calculated MW This protein is fused with a 6 × his tag at

C-terminus and the protein has a calculated MW of 32 kDa. The predicted N-terminus is Gly 30. DTT-reduced protein migrates as 35-45 kDa in SDS-PAGE due to

glycosylation. KDa

# Human CellExp Follistatin, human recombinant protein - Additional Info

Gene ID 10468
Gene Symbol FST

Other Names
Follistatin, FS, FST

Gene Source Human

Source HEK 293 cells Assay&Purity SDS-PAGE; ≥95%

Assay2&Purity2 HPLC;
Recombinant Yes

Target/Specificity

**Follistatin** 

#### **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

#### **Format**

Lyophilized powder

#### **Storage**

-20°C; Lyophilized from 0.22  $\mu m$  filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

#### Human CellExp Follistatin, human recombinant protein - 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

## Human CellExp Follistatin, human recombinant protein - Images

## Human CellExp Follistatin, human recombinant protein - Background

Follistatin, also known as activin-binding protein, FST and FSH-suppressing protein (FSP), and is a secreted autocrine glycoprotein that is expressed in nearly all tissues of higher animals. Its primary function is the binding and bioneutralization of members of the TGF-B superfamily, with a particular focus on activin, a paracrine hormone. Currently there are three reported isoforms, FS-288, FS-300, and FS-315. Two, FS-288 and FS-315, are known to be created by alternative splicing of the primary mRNA transcript. FS-300 (porcine follistatin) is thought to be the product of posttranslational modification via truncation of the C-terminal domain from the primary amino-acid chain. The activin-binding protein follistatin is produced by folliculostellate (FS) cells of the anterior pituitary. FS cells make numerous contacts with the classical endocrine cells of the anterior pituitary including gonadotrophs. In the tissues activin has a strong role in cellular proliferation. In the blood, activin and follistatin are both known to be involved in the inflammatory response following tissue injury or pathogenic incursion. Follistatin is involved in the development of the embryo. It has inhibitory action on bone morphogenic proteins (BMPs); BMPs induce the ectoderm to become epidermal ectoderm. Inhibition of BMPs allows neuroectoderm to arise from ectoderm, a process which eventually forms the neural plate. Other inhibitors involved in this process are noggin and chordin. Follistatin and BMPs are also known to play a role in folliculogenesis within the ovary. A study has also shown that increased levels of follistatin, by leading to increased muscle mass of certain core muscular groups, can increase life expectancy in cases of spinal muscular atrophy (SMA) in animal models.

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Shimasaki S.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:4218-4222(1988). Goshima N.,et al.Nat. Methods 5:1011-1017(2008). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Zhang Z.,et al.Protein Sci. 13:2819-2824(2004). Schneyer A.L.,et al.J. Clin. Endocrinol. Metab. 89:5067-5075(2004).