

## Recombinant human FST, Active

Cat. No. FST-1551H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant human Follistatin isoform 2 is a polypeptide chain containing 217 amino acids (30–217 of P19883 FST\_HUMAN). It has a predicted molecular mass of 32.3 kDa.

**Species** Human

**Source** Nicotiana Benthamiana

**ProteinLength** 30-217 a.a.

**Description** Follistatin is a monomeric glycoprotein that binds to ligands of the TGF- $\beta$  superfamily and regulates their activity by inhibiting their access to signalling receptors. Follistatin received its name because it suppresses synthesis and secretion of follicle-stimulating hormone (FSH) from the pituitary gland. The follistatin gene localizes to chromosome 5q11.2. It is composed of a relatively small 6-kb genomic DNA consisting of six exons. There is an alternative splice site that generates two major species, a full-length version that encodes a 344-amino acid preprotein differing by a 27-amino acid sequence from its carboxy-shortened version of the 317-amino acid form missing exon 6. Prior to activation, follistatin, like myostatin, undergoes further posttranslational modification to lose another 29 amino acids by removal of the signal peptide that results in polypeptides of 315 (FS315), often referred to as the long isoform and 288 (FS288), called the short isoform.

**Form** Recombinant human Follistatin is lyophilized from a Tris HCl 0.05M buffer at pH 7.4.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |  |
|-----------------------|--|
| <b>Molecular Mass</b> | 32.3 kDa   |
| <b>AA Sequence</b>    | HHHHHHGNCWLRQAKNGRCQVLYKTELSKEECCSTGRLSTSWTEEDVNDNTLFK<br>WMIFNGGAPNCIPCKETCENV DCGPGKKCRMNKKNKPRCVCAPDCSNITWKG<br>CGLDGKTYRNECALLKARCKEQPELEVQYQGRCKKTCRDVFC PGSSTCVVDQTN<br>NAYCVTCNRICPEPASSEQYLCGNDGVTYSSACHLRKATCLLGRSIGLAYEGKCIKA<br>KSCEDI QCTGGKKCLWDFKVGRCCLCDELCPDSK |
| <b>Endotoxin</b>      | < 0.04 EU/μg protein (LAL)   |
| <b>Purity</b>         | >97% by SDS-PAGE gel   |
| <b>Storage</b>        | This lyophilized preparation is stable at 2-8o C for short term, long storage it should be kept at -20oC. Reconstituted protein should be stored in working aliquots at -20°C. Repeated freezing and thawing is not recommended.   |
| <b>Reconstitution</b> | Centrifuge vial before opening. Lyophilized protein should be reconstituted in water to a concentration of 50 ng/μl. Optimal concentration should be determined for specific application and cell lines.   |

## GENE INFORMATION

|                        |  |
|------------------------|--|
| <b>Gene Name</b>       | FST follistatin [ Homo sapiens ]   |
| <b>Official Symbol</b> | FST  |
| <b>Synonyms</b>        | FST; follistatin; FS; activin-binding protein; follistatin isoform FST317; |
| <b>Gene ID</b>         | 10468  |
| <b>mRNA Refseq</b>     | NM_006350  |

Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |   |
|----------------------------|---|
| <b>Protein Refseq</b>      | NP_006341   |
| <b>MIM</b>                 | 136470  |
| <b>UniProt ID</b>          | P19883  |
| <b>Chromosome Location</b> | 5q11.2  |
| <b>Pathway</b>             | BMP receptor signaling, organism-specific biosystem; TGF Beta Signaling Pathway, organism-specific biosystem; TGF-beta signaling pathway, organism-specific biosystem; TGF-beta signaling pathway, conserved biosystem; |
| <b>Function</b>            | activin binding; heparan sulfate proteoglycan binding; protein binding; signal transducer activity;   |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA