



## Recombinant Human Follistatin

20201009BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

<b>Cat.-no.:</b>	<b>100-172</b>
<b>Size:</b>	20 µg
<b>Lot. No.:</b>	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	10468
<b>Synonyms:</b>	FST; FS

Follistatin belongs to a group of structurally-diverse diffusible proteins that binds to TGF-beta ligands and inhibit their activity by hindering access to signaling receptors. This naturally occurring antagonist binds to Activin, BMP-2,-4,-6,-7, Myostatin, GDF-11, and TGF-beta1. Follistatin is expressed in the pituitary, ovaries, decidual cells of the endometrium, and in some other tissues. Recombinant human Follistatin is a 31.5 kDa protein containing 288 amino acids including 36 cysteine residues.

## Sequence

GNCWLRQAKN GRCQVLYKTE LSKEECCSTG RLSTSWTEED  
 VNDNTLFKWM IFNGGAPNCI PCKETCENV D CGPGKKCRMN  
 KKNKPRCVCA PDCSNITWKG PVCGLDGKTY RNECALLKAR  
 CKEQPELEVQ YQGRCKKTCR DVFCPGSSTC VVDQTNNAAYC  
 VTCNRICPEP ASSEQYL CGN DGVTYSSACH LRKATCLLGR  
 SIGLAYEGKC IKAKSCEDIQ CTGGKKCLWD FKVGRGRCSL  
 CDELCPDSKS DEFVCASDNA TYASECAMKE AACSSGVILLE VKHSGSCN

## Database References

<b>Protein RefSeq:</b>	NP_006341.1
<b>Uniprot ID:</b>	P19883
<b>mRNA RefSeq:</b>	NM_006350

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng/µg of protein (<1EU/µg).
<b>Formulation</b>	Lyophilized (10mM Sodium Phosphate, pH 7.5 + 75mM NaCl)
<b>Length (aa):</b>	288
<b>MW:</b>	31.5 kDa

**Stability:** The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C.

**Reconstitution:** Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

**Biological Activity:** Determined by its ability to neutralize Activin A inhibitory effect of murine MPC-11 cells. The expected ED<sub>50</sub> is 0.1-0.4 µg/ml in the presence of 7.5 ng/ml Activin A.