

## GFH41 Recombinant Human Follistatin

### Description

Follistatin is an autocrine, activin-binding protein that is ubiquitously expressed with highest expression levels being in the ovary and skin. Follistatin negatively regulates the signaling of Transforming Growth Factor  $\beta$  (TGF- $\beta$ ) family members, such as activin, bone morphogenic proteins (BMP), myostatin, Growth Differentiation Factor 11 (GDF-11), and TGF- $\beta$ 1. Follistatin functions as an antagonist by binding TGF- $\beta$  family members to block interaction with their signaling receptors. Follistatin also inhibits the secretion of Follicle-Stimulating Hormone (FSH) from the anterior pituitary.

<b>Length</b>	289 aa
<b>Molecular Weight</b>	31.7 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P19883
<b>Purity</b>	$\geq$ 95% determined by reducing and non-reducing SDS-PAGE

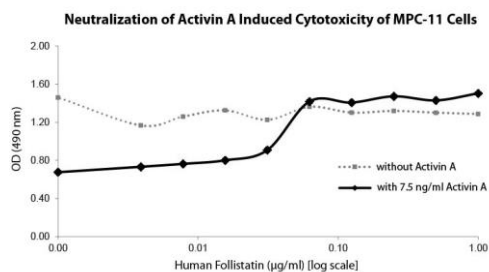
### Specifications

<b>Alternative Names</b>	FS, activin-binding protein, FSH-suppressing protein, FSP
<b>Biological Activity</b>	Human Follistatin is fully biologically active when compared to standard. The activity is determined by the neutralization of Activin A and it is typically less than 200 ng/ml. This corresponds to an expected specific activity of $5 \times 10^3$ units/mg.
<b>Endotoxin Level</b>	$\leq$ 1.00 EU/ $\mu$ g as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 7.5
<b>AA Sequence</b>	MGNCWLRQAK NGRQVLYKT ELSKEECCST GRLSTSWTEE DVNDNTLFWK MIFNGGAPNC IPCKETCENV DCGPGKKCRM NKKNKPRVCV APDCSNITWK GPVCGLDGKT YRNECALLKA RCKEQPELEV QYQGRCKKTC RDVFCPGSST CVVDQTNNAY CVTCNCRICPE PASSEQYLCG NDGVTYSSAC HLRKATCLLG RSIGLAYEGK CIKAKSCEDI QCTGGKKCLW DF

### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ as supplied. 1 month when stored at $4^{\circ}\text{C}$ after reconstituting as directed. 3 months when stored at $-20^{\circ}\text{C}$ to $-80^{\circ}\text{C}$ after reconstituting as directed.

### Data



Neutralization of Activin A induced cytotoxicity of MPC-11 cells assay for Human Follistatin. Cell proliferation was measured to calculate the ED50, which is as expected less than 200 ng/ml.