



# Recombinant Protein Technical Manual

**Recombinant Human Follistatin/FST Protein (Fc Tag)(Active)**  
RPES1556

## Product Data:

**Product SKU:** RPES1556

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_037541.1

## Protein Information:

**Molecular Mass:** 61.7 kDa

**AP Molecular Mass:** 70 kDa

**Tag:** C-Fc

**Bio-activity:** 1. Measured by its ability to bind human INHBA-his in a functional ELISA.2. Measured by its ability to bind mouse INHBA-his in a functional ELISA.3. Measured by its ability to neutralize Activin-mediated inhibition on MPC11 cell proliferation. The ED50 for this effect is typically 0.5-3 µg/mL in the presence of 10 ng/ml Recombinant Human ctivin A.

**Purity:** > 85 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** FS

## Immunogen Information:

**Sequence:** Met 1-Trp 344

## 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. Follistatins are expressed and subserve local regulatory roles in numerous extragonadal tissues, including brain, adrenal, bone marrow, and placenta but perhaps most notably in anterior pituitary—the classical target tissue for inhibin, the activin-follistatin system may play a key role in early embryogenesis. Follistatin binds directly to activin and functions as an activin antagonist. Specific inhibitor of the biosynthesis and secretion of pituitary follicle stimulating hormone, follistatin is a binding protein to activin. Since activin binds to follistatin, it is imperative to determine the nature of the activin/follistatin binding complex.