

BACKGROUND:

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- β) family members, such as activin, bone morphogenic proteins (BMPs), myostatin, growth differentiation factor 11 (GDF-11), and TGF- β 1. Follistatin functions as an antagonist by binding TGF- β family members to block interaction with their signaling receptors. Follistatin also inhibits the secretion of follicle-stimulating hormone (FSH) from the anterior pituitary.

Recombinant human Follistatin is a non-glycosylated protein monomer, containing 289 amino acids and having a molecular mass of 31.7 kDa.

Cat. No.:
RP1041

Alternate Names:
FS, activin-binding protein, FSH-suppressing protein (FSP)

AA Sequence:
MGNCWLRQAK NGRCQVLYKT ELSKEECCST GRLST
SWTEE DVNDNTLFKW MIFNGGAPNC IPCKETCENV
DCGPGKKCRMNKNKPRCVC APDCSNITWK GPVCG
LDGKT YRNECALLKA RCKEQPELEV YQQRCKKTC R
DVFCPGSST CVVDQTNNAY CVTCNRICPEPASSEQYL
CG NDGVTYSSAC HLRKATCLLG RSIGLAYEGK CIKA
KSCEDI QCTGGKKCLW DFKVGRGRCS LCDELCPDS
K SDEPVCASDNATYASECAMK EAACSSGVLL EVKHS
GSCN

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
10 mM sodium phosphate, 50mM sodium chloride, pH 7.5

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
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.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
The activity is measured by the dose-dependent neutralization of human Activin A, with Bioactivity Acceptance Criteria ED50 at 200 ng/mL.

