DATA SHEET

PPH41 PODS® Human Follistatin

Description

The product contains the polyhedrin protein co-crystalized with Human Follistatin. 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 β (TGF-β) family members, such as activin, bone morphogenic proteins (BMP), myostatin, Growth Differentiation Factor 11 (GDF-11), and TGF-β1. 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.

Length	333 aa
Molecular Weight	36.7 kDa
Source	*Spodoptera frugiperda (Sf9) cell culture*
Accession Number	P19883

Usage Recommendation

PODS® co-crystals provide a depot of proteins which are steadily secreted. It has been estimated that the biological activity of 50 million PODS® co-crystals generates the same peak dose as 3.3 µg of standard recombinant protein. However, at 5 days following the start of seeding the PODS® co-crystals, there are more than 50% of these peak levels still present in the culture system. Ultimately, the amount of PODS® co-crystals that is optimal for a particular experiment should be determined empirically. Based on previous data, we suggest using 50 million PODS® co-crystals in place of 3.3 µg of standard growth factor as a starting point."To control for cross-reactivity with cells or as a negative control, we recommend using PODS® growth factors alongside PODS® Empty crystals, as the latter do not contain or release cargo protein.

Specifications

Alternative Names	FS, activin-binding protein, FSH-suppressing protein, FSP
Endotoxin Level	<0.06 EU/ml as measured by gel clot LAL assay
Formulation	PODS® were lyophilized from a volatile solution
AA Sequence	MADVAGTSNR DFRGREQRLF NSEQYNYNNS KNSRPSTSLY KKAGFGNCWL RQAKNGRCQV LYKTELSKEE CCSTGRLSTS WTEEDVNDNT LFKWMIFNGG APNCIPCKET CENVDCGPGK KCRMNKKNKP RCVCAPDCSN ITWKGPVCGL DGKTYRNECA LLKARCKEQP ELEVQYQGRC KKTCRDVFCP GSSTCVVDQT NNAYCVTCNR ICPEPASSEQ YLCGNDGVTY SSACHLRKAT CLLGRSIGLA YEGKCIKAKS CEDIQCTGGK KCLWDFKVGR GRCSLCDELC PDSKSDEPVC ASDNATYASE CAMKEAACSS GVLLEVKHSG SCN

Preparation and Storage

Reconstitution	PODS® co-crystals may be reconstituted at 200 million co-crystals/ml in water. 20% glucose has a buoyant density closer to PODS® co-crystals and can be useful for aliquoting.PODS® co-crystals are highly stable when stored in aqueous solution (pH range 6 - 8).
Stability and Storage	Upon receipt, store at 4°C. PODS® co-crystals are stable for at least 1 year when dry and 6 months when resuspended.