TECHNICAL DATA SHEET

Recombinant Human Follistatin (Carrier-Free)

Catalog Number: 21-9070

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human Follistatin (Carrier-Free)

DESCRIPTION

Follistatin is a secreted protein that binds to ligands of the TGF-beta family and regulates their activity by inhibiting their access to signaling receptors. It was originally discovered as an activin antagonist whose activity suppresses expression and secretion of the pituitary hormone FSH (follicle stimulating hormone).

MOLECULAR MASS

Recombinant Human Follistatin is a 31.5 kDa protein containing 288 amino acids. Its primary structure contains three cysteine-rich domains (called FS domains), each followed by a protease-inhibitory kazal domain.

AMINO ACID SEQUENCE

GNCWLRQAKN GRCQVLYKTE LSKEECCSTG RLSTSWTEED VNDNTLFKWM IFNGGAPNCI PCKETCENVD CGPGKKCRMN KKNKPRCVCA PDCSNITWKG PVCGLDGKTY RNECALLKAR CKEQPELEVQ YQGRCKKTCR DVFCPGSSTC VVDQTNNAYC VTCNRICPEP ASSEQYLCGN DGVTYSSACH LRKATCLLGR SIGLAYEGKC IKAKSCEDIQ CTGGKKCLWD FKVGRGRCSL CDELCPDSKS DEPVCASDNA TYASECAMKE AACSSGVLLE VKHSGSCN

SOURCE	APPLICATIONS	PURITY	STORAGE
E.coli	Bioassay	95 %	-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Chicken, Human, Mouse, Rat

BIOACTIVITY

Determined by its ability to neutralize Activin A inhibitory effect of Mouse MPC-11 cells. The expected ED50 is 0.1-0.4 µg/ml in the presence of 7.5 ng/ml Activin A.

RESEARCH AREAS

Stem Cells & Differentiation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Harrington, A.E. Structural basis for the inhibition of activin signalling by follistatin. 2006. The EMBO Journal; 25(5):1035-45. Edqvist, P.H. Axon-bearing and axon-less horizontal cell subtypes are generated consecutively during chick retinal development from progenitors that are sensitive to follistatin. 2008. BMC Developmental Biology; 8:46.