

TECHNICAL DATA SHEET

Recombinant Human Serpin F1 (PEDF) (Carrier-free)

Catalog Number: 21-7131

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human Serpin F1 (PEDF) (Carrier-free)

DESCRIPTION

Serpin F1, also known as PEDF, is a secreted glycoprotein that belongs to the clade F subfamily of the serpin family of proteinase inhibitors. Because it does not display any serine protease inhibitory activity it belongs to a second group, separate from other serpin family members that do possess typical protease inhibitor function. Serpin F1 is expressed in many tissues including lung, liver, skin, heart and ovary, and it has diverse functions. These include anti-angiogenic, neuroprotective, and anti-carcinogenic activities. The protein has been mapped and different regions have been associated with its differing roles. It binds to the PEDF receptor, and may have other receptor targets.

MOLECULAR MASS

Recombinant Human Serpin F1 is a non-glycosylated protein of 400 amino acids, corresponding to a molecular weight of 44.5 kDa.

AMINO ACID SEQUENCE

MQNPASPPEE GSPDPDSTGA LVEEEDPFFK VPVNKLAHAV SNFGYDLRYV RSSMSPTTNV LLSPLSVATA LSALSLGAEQ
 RTESIIHRAL YYDLISSPDI HGTYKELLDV VTAPQKNLKS ASRIVFEKKL RIKSSFVAPL EKSYGTRPRV LTGNPRLDLQ EINNWWQAQM
 KGKLARSTKE IPDEISILL GVAHFKGQWV TKFDSRKTSI EDFYLDEERT VRVPMMSDPK AVLRYGLDSD LSCKIAQLPL TGSMSIIFFL
 PLKVTQNLTL IEESLTSEFI HDIDRELKTV QAVLTVPKLK LSYEGEVTKS LQEMKLQSLF DSPDFSKITG KPIKLTQVEH RAGFEWNEDG
 AGTTPSPGLQ PAHLTFPLDY HLNQPFIFVL RDTDTGALLF IKGILDPRGP

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

90 %

STORAGE

-20°C

PROTEIN CONTENT

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

ENDOTOXIN LEVEL

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

AUTHENTICITY

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

CROSS REACTIVITY

BIOACTIVITY

No data available at this time.

RESEARCH AREAS

Apoptosis, Angiogenesis & Cardiovascular, Cancer, Neurobiology

RECONSTITUTION

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

REFERENCES

Steele FR, Chader GJ, Johnson LV and Tombran-Tink J. 1993. Proc Natl Acad Sci USA. 90(4): 1526-1530. Dawson DW, Volpert OV, Gillis P, Crawford SE, Xu H, Benedict W and Bouck NP. 1999. Science. 285(5425): 245-248. Filleur S, Volz K, Nelius T, Mirochnik Y, Huang H, Zaichuk TA, Aymerich MS, Becerra SP, Yap R, Veliceasa D, Shroff EH and Volpert OV. 2005. Cancer Res. 65(12): 5144-5152. Filleur S, Nelius T, de Riese W and Kennedy RC. 2009. J Cell Biochem. 106(5): 769-775.

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