Recombinant Human Pigment Epithelium-derived Factor

Catalog No: #AP60026

Package Size: #AP60026-1 5ug #AP60026-2 100ug #AP60026-3 500ug

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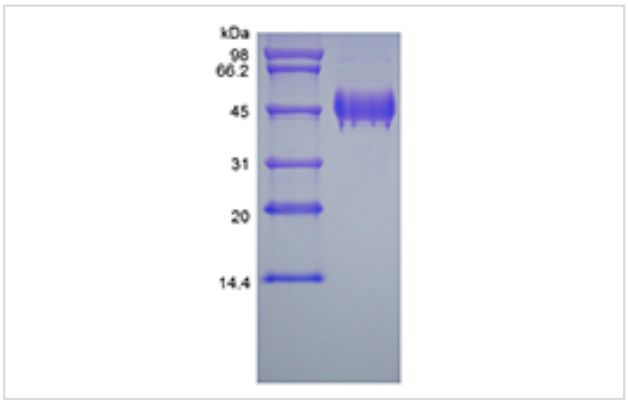
Description

Product Name	Recombinant Human Pigment Epithelium-derived Factor
Host Species	Escherichia coli.
Purification	> 97 % by SDS-PAGE and HPLC analyses.
Other Names	SerpinF1, EPC-1, Cell proliferation-inducing gene 35 protein
Calculated MW	Approximately 44.4 KDa, a single non-glycosylated polypeptide chain containing 399 amino acids.
Target Sequence	QNPASPPEEG SPDPDSTGAL VEEEDPFFKV PVNKLAAAVS NFGYDLYRVR SSTSPTTNVL LSPLSVATAL SALSLGAEQR TESIIHRALY YDLISSPDIH GTYKELLDTV TAPQKNLKSA SRIVFEKKLR IKSSFVAPLE KSYGTRPRVL TGNPRLDLQE INNWVQAQMK GKLARSTKEI PDEISILLLG VAHFKGQWVT KFDSRKTSLE DFYLDEERTV RVPMMSDPKA VLRYGLDSDL SCKIAQLPLT GSMSIIFFLP LKVTQNLTLI EESLTSEFIH DIDRELKTVQ AVLTVPKLKL SYEGEVTKSL QEMKLQSLFD SPDFSKITGK PIKLTQVEHR AGFEWNEDGA GTTPSPGLQP AHLTFPLDYH LNQPFIFVLR DTDTGALLFI GKILDPRGP
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.- 12 months from date of receipt, -20 to -70 °C as supplied.- 1 month, 2 to 8 °C under sterile conditions after reconstitution.- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Images



Background

Pigment epithelium-derived factor (PEDF) is encoded by the SERPINF1 gene in humans and found in verebrates. It is a secreted phosphoglycoprotein that belongs to the clade F subfamily, serpin superfamily of proteinase inhibitors. The PEDF is a noninhibitory serpin with neurotrophic, anti-angiogenic, and anti-tumorigenic properties. It is synthesized as a 418 a.a. about 50kDa precursor that contains a 19 a.a. signal sequence and a 399 a.a. mature region that shows a pyroglutamate at Gln20. Like other serpins, it contains three β-sheets, 810 α-helices, and a C-terminal RCL (reactive center loop). Unlike other serpins with Ser protease inhibiting activity. PEDF has functions of inducing extensive neuronal differentiation in retinoblastoma cells, inhibiting of angiogenesis. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity. PEDF is researched as a therapeutic candidate for treatment of such conditions as choroidal

neovascularization, heart disease, and cancer.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.