

## SERPINF1

### Recombinant Human Pigment Epithelium-derived Factor

<b>Catalog No.</b>	CRP276A CRP276B CRP276C	<b>Quantity:</b>	5 µg 20 µg 1.0 mg
<b>Alternate Names:</b>	Cell proliferation-inducing gene 35 protein, EPC-1, PEDF, Serpin F1		
<b>Description:</b>	<p>Pigment Epithelium-derived Factor (PEDF) is a noninhibitory serpin with neurotrophic, anti-angiogenic, and anti-tumorigenic properties. It is a 50 kDa glycoprotein produced and secreted in many tissues throughout the body. A major component of the anti-angiogenic action of PEDF is the induction of apoptosis in proliferating endothelial cells. In addition, PEDF is able to inhibit the activity of angiogenic factors such as VEGF and FGF-2. The neuroprotective effects of PEDF are achieved through suppression of neuronal apoptosis induced by peroxide, glutamate, or other neurotoxins. The recent identification of a lipaselinked cell membrane receptor for PEDF (PEDF-R) that binds to PEDF with high affinity should facilitate further elucidation of the underlying mechanisms of this pluripotent serpin. To date, PEDF-R is the only signaling receptor known to be used by a serpin family member. The unique range of PEDF activities implicate it as a potential therapeutic agent for the treatment of vasculature related neurodegenerative diseases such as age-related macular degeneration (AMD) and proliferative diabetic retinopathy (PDR). PEDF also has the potential to be useful in the treatment of various angiogenesis-related diseases including a number of cancers.</p>		
<b>UniProt ID:</b>	P36955		
<b>Gene ID:</b>	5176		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	~ 44.4 kDa (399 aa) monomer		
<b>Formulation:</b>	Lyophilized from sterile-filtered 20 mM PBS, pH7.4		
<b>Purity:</b>	>97% by SDS-PAGE and HPLC analyses.		
<b>Endotoxin Level:</b>	< 1 EU/µg of rHuPEDF as determined by LAL method		
<b>Biological Activity:</b>	ED <sub>50</sub> < 2 ng/ml, determined by its ability to enhance the adhesion of human Saos2 cells to bovine Collagen I coated plate.		
<b>Specific Activity:</b>	> 5.0 × 10 <sup>5</sup> IU/mg		
<b>Amino Acid Sequence:</b>	<p>QNPASPPEEG SPDPDSTGAL VEEEDPFFKV PVNKLAAAVS NFGYDLYRVR  SSTSPTTNVL LSPLSVATAL SALS LGAEQR TESIIHRALY YDLISSPDIIH GTYKELLDTV  TAPQKNLKSA SRIVFEKKLR IKSSFVAPLE KSYGTRPRVL TGNPRDLQE  INNWWQAQMK GKLARSTKEI PDEISILLG VAHFKGQWVT KFDSRKSLE  DFYLDEERTV RVPMMSDPKA VLR YGLDSDL SCKIAQLPLT GSMSIIFFLP  LKVTQNLTLI EESLTSEFIH DIDRELKTVQ AVLTVPKLLK SYEGEVTKSL  QEMKLQSLFD SPDFSKITGK PIKLTQVEHR AGFEWNEDGA GTTPSPGLQP  AHLTFPLDYH LNQPFIIVLR DTDTGALLFI GKILDPRGP</p>		

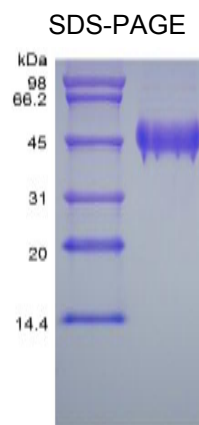


**Reconstitution:**

**Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/mL. Further dilutions should be made in appropriate buffered solutions.

**Storage & Stability:**

Stable at 2-8°C, but recommended to store at -20°C to -80°C. Upon reconstitution, stable for up to 1 week at 2-8°C. For longer term, store in working aliquots at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.