Human, Recombinant (rHuPEDF)  
Expressed in E. coli  
Cat. No. CRP0870  
Lot. No. (See product label)  

**PRODUCT INFORMATION**

*Description:* 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 lipase-linked 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.

*Amino-Acid Sequence:* 400 aa (The first 52 amino acid is: MQNPASPPPEEGSPDPSTGALVEEDPFKKVPVNKLAAAVSNFGYDLYRVS), non-glycosylated

*M. W.:* 44,500 Da  
*Recombinant:* Expressed in E. coli  
*Purity:* >95% by SDS-PAGE and HPLC analyses.

*Formulation:* Lyophilized from a 0.2mm filtered concentrated (1.0mg/ml) solution in 20mM PB, pH7.4, 150mM NaCl.

*Endotoxin:* Less than 1EU/mg of rHuPEDF as determined by LAL method.

*Reconstitution:* We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions.

*Storage:* This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at ≤-20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at ≤-20°C to ≤-70°C. Avoid repeated freeze/thaw cycles.

**REFERENCES**


**FOR RESEARCH USE ONLY**