

## Recombinant Human PEDF

<b>CATALOG #:</b>	4988-20	20 µg
	4988-100	100 µg
	4988-1000	1 mg
<b>LOT #:</b>	_____	
<b>SYNONYMS:</b>	Pigment epithelium-derived factor, PEDF, Serpin-F1, SerpinF1, EPC-1, EPC1, PIG35	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	>95% by SDS-PAGE and HPLC analyses Endotoxin level is <0.1 ng/µg of human PEDF.	
<b>MOLECULAR WT:</b>	44.5 kDa	
<b>FORM:</b>	The sterile filtered concentrated (1 mg/ml) protein solution was lyophilized with 20 mM phosphate buffer & 150 mM NaCl pH-7.4.	

### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in sterile dH<sub>2</sub>O to a concentration of 0.1 -1 mg/ml and let the lyophilized pellet dissolve completely. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.

### STORAGE CONDITIONS:

The lyophilized human PEDF is best-stored desiccated below 0°C. Reconstituted PEDF should be stored in working aliquots at -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

### DESCRIPTION:

PEDF is a noninhibitory serpin with neurotrophic, anti-angiogenic, and anti-tumorigenic properties. PEDF is a 50,000 dalton glycoprotein created and secreted in many tissues all the way through the body. A key component of the anti-angiogenic action of PEDF is the induction of apoptosis in proliferating endothelial cells. Additionally, PEDF is capable to inhibit the activity of angiogenic factors such as VEGF and FGF-2. The recognition 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. The unique range of PEDF activities associate 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 in addition has the potential to be functional in the treatment of various angiogenesis-related diseases including a number of cancers. Recombinant human PEDF produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 400 amino acids and having a molecular mass of 44.5 kDa.

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