



## Product Datasheet

<b>Product Name</b>	Recombinant Human Pigment Epithelium-Derived Factor
<b>Cata No</b>	CB501286
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Pigment epithelium-derived factor, PEDF, Serpin-F1, SerpinF1, EPC-1, EPC1, PIG35.

### Description

PEDF is a neurotrophic protein that induces extensive neuronal differentiation in retinoblastoma cells. SerpinF1 is a potent inhibitor of angiogenesis. EPC1 doesn't undergo the stressed to relaxed conformation transition characteristic as of the active serpins since it exhibits no serine protease inhibitory activity.

Aqueous humour level of asymmetric dimethylarginine is correlated with PEDF in humans. ADMA and PEDF levels are increased in response to inflammation in uveitis. Lack of PEDF expression is a potent factor for the enhancement of tumor growth and angiogenesis in breast cancer.

PEDF & VEGF genes contribute to the development of diabetic retinopathy. PEDF and VEGF structural changes in blood vessel wall play an important role in the pathophysiology of PD patients.

PEDF-overexpressing tumors exhibited reduced intratumoral angiogenesis. SerpinF1 is a new promising approach for the treatment of osteosarcoma.

Levels of the natural ocular anti-angiogenic factor SentrinF1 (PEDF) is associated with proliferative retinopathy. VEGF secreted by retinal pigment epithelial cells upregulates PEDF expression via VEGFR-1 in an autocrine manner. Sentrin-F1 concentration in the aqueous humor of diabetic patients predicts who will develop progression of retinopathy. PEDF blocks angiogenic effects of leptin through its anti-oxidative properties.

PEDF Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 413 amino acids and having a molecular mass of 46.1 kDa. The Human Sentrin-F1 is fused to His tag at N-Terminus. The Human PEDF is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Purity

Greater than 95% as determined by SDS-PAGE.

### Formulation

The sterile filtered concentrated (0.5mg/ml) protein solution was lyophilized with 20mM Tris & 150mM NaCl pH-7.5.

### Reconstitution

Add deionized water to a working concentration of 0.5 mg/ml and let the lyophilized pellet dissolve completely.

### Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to **avoid repeated freezing/thawing cycles**. Reconstituted protein can be stored at 4°C for a limited period of time.

### Sequence

**\* For Non-Clinical Research Use Only \***



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MRGSHHHHHH GMASQNPASP PEEGSPDPDS  
TGALVEEEDP FFKVPVNKLA AAVSNFGYDL  
YRVRSSMSPT TNVLLSPLSV ATALSALSLG  
AEQRTEIIH RALYYDLISS PDIHGTYKEL  
LDTVTRQKN LKSASRIVFE KKLRIKSSFV  
APLEKSYGTR PRVLTGNPRL DLQEINNWWQ  
AQMKGKLARS TKEIPDEISI LLLGVAHFVG

QWVTKFDSRK TSLEDFYLDE ERTVRVPMMS  
DPKAVLRYGL DSDLSCKIAQ LPLTGSMMSII  
FFLPLKVTQN LTLIEESLTS EFIHDIDREL  
KTVQAVLTVP KKLKSYEGEV TKSLQEMKLQ  
SLFDSPDFSK ITGKPIKLTQ VEHRAGFEWN  
EDGAGTTPSP GLQPAHLTFP LDYHLNQPFI  
FVLRDTRDTGA LLFIGKILDPRGP

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