



## PEDF (Pigment Epithelium Derived Factor), FLAG Tag, human recombinant (HEK293) (rHuPEDF-FLAG)

**Catalog No:** 97186  
**Lot No:** XXXXX  
**Source:** HEK293  
**Synonyms:** Pigment epithelium-derived factor, PEDF, Serpin-F1, SerpinF1, EPC-1, EPC1, PIG35.

### Background

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.

### Description

PEDF human recombinant produced in HEK cells is a single, glycosylated, polypeptide chain containing a total of 410 amino acids, having a molecular mass of 45.6 kDa. PEDF is fused to an 11 aa FLAG Tag at C-terminus purified by proprietary chromatographic techniques.

### Physical Appearance

Filtered white lyophilized (freeze-dried) powder.

### Formulation

The filtered (0.4 µm) concentrated (0.5 mg/ml) protein solution was lyophilized with 20 mM Tris and 20 mM NaCl pH 7.5.

### Solubility

It is recommended to add deionized water to a working concentration of 0.5 mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

### 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.

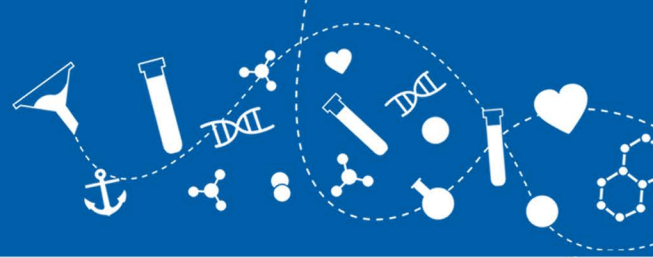
### Purity

Greater than 95% as determined by densitometric image analysis.

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### Amino Acid Sequence

QNPASPPEEG SPDPDSTGAL VEEEDPFFKV PVNKLAAAVS NFGYDLYRVR SSTSPTTNVL LSPLSVATAL SALS LGAEQR  
TESIIHRALY YDLISSPDIH GTYKELLDTV TAPQKNLKSA SRIVFEKKLR IKSSFVAPLE KSYGTRPRVL TGNPRLDLQE  
INNWWQAQMK GK LARSTKEI PDEISILLG VAHFKGQWVT KFDSRKTSLE DFYLDEERTV RVPMMSDPKA VLRYGLDSDL  
SCKIAQLPLT GSMSIIFFLP LKVTQNLTLI EESLTSEFIH DIDRELKTQ AVLTVPKLKL SYEGEVTKSL QEMKLQSLFD  
SPDFSKITGK PIKLTQVEHR AGFEWNEDGA GTPSPGLQP AHLTFPLDYH LNQPFI FVLR DTDGALLFI GKILDPRGPA  
AADYKDDDDK

### Usage

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