# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 20-418aa

**UniProt No.** P36955

NCBI Accession No. NP\_002606.3

### **Alternative Names**

Pigment epithelium-derived factor, Pigment epithelium-derived factor, EPC-1, PIG35, SERPINF1, Pigment epithelium-derived factor EPC 1, EPC1, PIG 35, Pigment epithelium derived factor, Proliferation inducing protein 35, SERPIN F1, Serpin peptidase inhibitor clade F member 1, SERPINF 1,

# **PRODUCT SPECIFICATION**

### **Molecular Weight**

46.7 kDa (420aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol

Purity

> 90% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

### Description

PEDF, also known as SERPINF1, is an extracellular neurotrophic agent, first identified as a secreted product in conditioned medium from cultured fetal human retinal pigment epithelial (RPE) cells. It was reported that PEDF isolated from medium conditioned by human fetal RPE primary cultures promotes neurite outgrowth in cultured human retinoblastoma Y-79 cells. PEDF is also a member of the serpin family, a group of serine protease



inhibitors. As PEDF does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity. Recombinant PEDF protein containing a natural variant T72M was expressed in E. coli and purified by using conventional chromatography techniques.

#### **Amino acid Sequence**

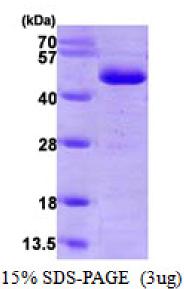
MGSSHHHHHH SSGLVPRGSH MQNPASPPEE GSPDPDSTGA LVEEEDPFFK VPVNKLAAAV SNFGYDLYRV RSSMSPTTNV LLSPLSVATA LSALSLGAEQ RTESIIHRAL YYDLISSPDI HGTYKELLDT VTAPQKNLKS ASRIVFEKKL RIKSSFVAPL EKSYGTRPRV LTGNPRLDLQ EINNWVQAQM KGKLARSTKE IPDEISILLL GVAHFKGQWV TKFDSRKTSL EDFYLDEERT VRVPMMSDPK AVLRYGLDSD LSCKIAQLPL TGSMSIIFFL PLKVTQNLTL IEESLTSEFI HDIDRELKTV QAVLTVPKLK LSYEGEVTKS LQEMKLQSLF DSPDFSKITG KPIKLTQVEH RAGFEWNEDG AGTTPSPGLQ PAHLTFPLDY HLNQPFIFVL RDTDTGALLF IGKILDPRGP

### **General References**

Steele FR., et al. (1993) Proc Natl Acad Sci u S A. 90(4):1526-30.. Becerra SP., et al. (1995) J Biol Chem. 270(43):25992-9.

### DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

