



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Recombinant Human Pigment Epithelium-Derived Factor, HEK

Catalog No.
228-11222

Source
HEK 293

Synonyms:

Pigment epithelium-derived factor, PEDF, Serpin-F1, SerpinF1, EPC-1, EPC1, PIG35.

Introduction:

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 410 amino acids and having a molecular mass of 45.6 kDa.

The Human Sentrin-F1 is fused to FLAG tag at N-Terminus.

The Human PEDF is purified by proprietary chromatographic techniques.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Physical Appearance:

Filtered White lyophilized (freeze-dried) powder.

Formulation:

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

Solubility:

It is recommended to add deionized water to a working concentration of 0.5mg/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 SDS-PAGE.

Amino Acid Sequence:

QNPASPPEEG SPDPDSTGAL VEEEDPFFKV PVNKLAAAVS NFGYDLYRVR
SSTSPTTNVL LSPLSVATAL SALSLGAEQR TESIHRALY YDLISSPDIH
GTYKELLDTV TAPQKNLKSA SRIVFEKKLR IKSSFVAPLE KSYGTRPRVL
TGNPRLDLQE INNWVQAQMK GKLARSTKEI PDEISILLG VAHFKGQWVT
KFDSRKTSLE DFYLDEERTV RVPMMSDPKA VLRYGLDSDL SCKIAQLPLT
GSMSIIFFLP LKVTQNLTLI EESLTSEFIH DIDRELKTVQ AVLTVPKLKL
SYEGEVTKSL QEMKLQSLFD SPDFSKITGK PIKLTQVEHR AGFEWNEDGA
GTPSPGLQP AHLTFPLDYH LNQPFI FVLR DTDTGALLFI GKILDPRGPA
AADYKDDDDK

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