



碧云天生物技术/Beyotime Biotechnology
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Recombinant Human PEDF

产品编号	产品名称	包装
P5309-5μg	Recombinant Human PEDF	5μg
P5309-100μg	Recombinant Human PEDF	100μg
P5309-500μg	Recombinant Human PEDF	500μg

产品简介:

Species	Gene ID	Accession	Source	Length	MW	Tag
Human	5176	P36955	<i>E. coli</i>	399aa	44.4kDa	—

About this protein	
Name	Recombinant Human PEDF (Recombinant Human Pigment Epithelium-derived Factor; rHuPEDF); 重组人色素上皮衍生因子
Synonyms	EPC-1; PEDF; Cell proliferation-inducing gene 35 protein; EPC-1PIG35; PEDFpigment epithelium-derived factor; pigment epithelium derived factor), member 1; proliferation-inducing protein 35; serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin; Serpin F1; serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epitheliumderived factor), member 1
Purity	>97% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED50 as determined by its ability to enhance the adhesion of human Saos2 cells to bovine Collagen I coated plate is less than 2ng/ml, corresponding to a specific activity of $>5.0 \times 10^5$ IU/mg.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2μm filtered concentrated solution in 20mM PB, pH7.4, 150mM NaCl.
Endotoxin	Less than 1EU/μg of rHuPEDF as determined by LAL method.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Category	Cytokine
Background	Pigment epithelium-derived factor (PEDF) is encoded by the SERPINF1 gene in humans and found in vertebrates. It is a secreted phosphoglycoprotein that belongs to the clade F subfamily, serpin superfamily of proteinase inhibitors. The PEDF is a noninhibitory serpin with neurotrophic, anti-angiogenic, and anti-tumorigenic properties. It is synthesized as a 418a.a. about 50kDa precursor that contains a 19a.a. signal sequence and a 399a.a. mature region that shows a pyroglutamate at Gln20. Like other serpins, it contains three β-sheets, 810 α-helices, and a C-terminal RCL (reactive center loop). Unlike other serpins with Ser protease inhibiting activity. PEDF has functions of inducing extensive neuronal differentiation in retinoblastoma cells, inhibiting of angiogenesis. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity. PEDF is researched as a therapeutic candidate for treatment of such conditions as choroidal neovascularization, heart disease, and cancer.
Amino Acid Sequence	QNPASPPEEG SPDPDSTGAL VEEEDPFFKV PVNKLAAAVS NFGYDLRVR SSTSPPTNVL LSPLSVATAL SALS LGAEQR TESIHRALY YDLISSPDH GTYKELLDTV TAPQKNLKSA SRIVFEKKLR IKSSFVAPLE KSYGTRPRVL TGNPRLDLQE INNWVQAQMK GKLARSTKEI PDEISILLG VAHFKGQWVT KFDSRKTSL DFYLDEERTV RVPMMSPDKA VLRYGLDSDL SCKIAQLPLT GSMSIIFFLP LKVTQNLTLI EESLTSEFIH DIDRELKTQV AVLTVPKLKL SYEGEVTKSL QEMKLQSLFD SPDFSKITGK PIKLTQVEHR AGFEWNEDGA GTTPSPGLQP AHLTFPLDYH

LNQPFIFVLR DTDTGALLFI GKILDPRGP

包装清单：

产品编号	产品名称	包装
P5309-5µg	Recombinant Human PEDF	5µg
P5309-100µg	Recombinant Human PEDF	100µg
P5309-500µg	Recombinant Human PEDF	500µg
—	说明书	1份

保存条件：

-20°C或更低温度保存，至少一年有效。由于蛋白的每次冻融均会引起部分失活，所以首次配制成相应浓度的储存液后(请根据产品简介中Reconstitution一栏的信息配制储存液)，须分装后-20°C或更低温度冻存，以避免反复冻融。

注意事项：

- 由于有些塑料管壁对某些蛋白有较强的吸附作用，溶液中的蛋白很容易粘附在管壁上，并且粘附后的蛋白很难与管壁分离。而载体蛋白(Carrier protein, 如0.1% BSA等)的主要作用是预先封闭塑料管壁上的蛋白结合位点，使细胞因子或重组蛋白不会粘附于管壁。所以一定要使用产品简介中Reconstitution一栏的信息配制储存液。
- 本产品仅限于专业人员的科学研究用，不得用于临床诊断或治疗，不得用于食品或药品，不得存放于普通住宅内。
- 为了您的安全和健康，请穿实验服并戴一次性手套操作。

使用说明：

1. 收到产品后请立即按照说明书推荐的条件保存。除非特别注明，碧云天相关产品均为冻干粉，由于微量的蛋白在冻干过程中沉积在管内，形成很薄或不可见的蛋白层，所以在打开管盖前，我们建议在离心机中约8,000-12,000g离心10-30秒，使附着在管盖或管壁上的蛋白聚集于管底。
2. 请根据实验目的并按照产品简介中Reconstitution一栏中的信息配制储存液。大多数细胞因子或重组蛋白的冻干粉是非常容易溶解的，一般用移液枪的枪头轻吹几下或者轻轻摇晃瓶子，即可使细胞因子或重组蛋白完全溶解。请勿用vortex剧烈振荡，以免蛋白变性而失活。
3. 具体的最佳工作浓度请自行参考相关文献，或者根据实验目的，以及特定细胞和动物，通过实验进行摸索和优化。

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