PEDF (SERPINF1) Recombinant Protein

PRODUCT OVERVIEW

Product Name	PEDF (SERPINF1), Recombinant Protein
Full Product Name	PEDF, Recombinant, Human (Pigment epithelium-derived factor, Cell proliferation-inducing gene 35 protein, EPC-1, Serpin F1)
Product Gene Name	SERPINF1 recombinant protein
Host	Human, CHO cells
Form/Format	Supplied as a lyophilized powder from a 0.2um filtered solution in PBS pH 7.2.
Purity/Purification	Highly Purified >95% (SDS-PAGE)
Preparation and Storage	Short-term Storage: +4 degree C Long-term Storage: -20 degree C Stable for at least 6 months after receipt when stored at -20 degree C.
Molecular Weight	~47kD (SDS-PAGE)
Chromosome Location	Chromosome: 17; NC_000017.10 (1665259..1680859). Location: 17p13.3
OMIM	172860
3D Structure	ModBase 3D Structure for P36955
Product Categories/Family for SERPINF1 recombinant protein	Molecular Biology; MB-Protease Inhibitors
Related Product Information for SERPINF1 recombinant protein	Pigment epithelium-derived factor (PEDF) is a 47 kD secreted glycoprotein that belongs to the non-inhibitory serpin family group. PEDF is widely expressed in adult and foetal tissues, including brain, spinal cord, plasma, bone, prostate, pancreas, heart and lung. PEDF acts as an angiogenesis inhibitor with neurotrophic, immunomodulation and antitumor properties. It functions as anti-angiogenic agent by counterbalancing the proangiogenic effect of VEGF. PEDF is one of the most abundant proteins released by adipocytes and induces insulin resistance in adipocytes and human skeletal muscle cells. Recently, it has been reported that PEDF is sufficient to maintain the self-renewal of pluripotent human embryonic stem cells.
Other Notes	Small volumes of SERPINF1 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for SERPINF1 purchase	MBS637307 is a recombinant protein targeting SERPINF1. Also known as PEDF, Recombinant, Human (Pigment epithelium-derived factor, Cell proliferation-inducing gene 35 protein, EPC-1, Serpin F1). Host: Human, CHO cells.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SERPINF1. It may not necessarily be applicable to this product.

NCBI GI #	39725934
NCBI GeneID	5176
NCBI Accession #	NP_002606.3
UniProt Primary Accession #	P36955
UniProt Secondary Accession #	Q13236; Q2TU83; Q96CT1; Q96R01; Q9BWA4; F1T092

UniProt Related Accession #	P36955
GenBank Nucleotide #	NM_002615.5
NCBI Official Full Name	pigment epithelium-derived factor
NCBI Official Synonym Full Names	serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1
NCBI Official Symbol	SERPINF1
NCBI Official Synonym Symbols	OI6; OI12; PEDF; EPC-1; PIG35
UniProt Protein Name	Pigment epithelium-derived factor
UniProt Synonym Protein Names	Cell proliferation-inducing gene 35 protein; EPC-1; Serpin F1
Protein Family	Pigment epithelium-derived factor
UniProt Gene Name	SERPINF1
UniProt Synonym Gene Names	PEDF; PEDF
UniProt Entry Name	PEDF_HUMAN
NCBI Protein Information	pigment epithelium-derived factor; serpin F1; cell proliferation-inducing gene 35 protein; serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1
NCBI Summary for SERPINF1	The protein encoded by this gene is a member of the serpin family, although it does not display the serine protease inhibitory activity shown by many of the other serpin family members. The encoded protein is secreted and strongly inhibits angiogenesis. In addition, this protein is a neurotrophic factor involved in neuronal differentiation in retinoblastoma cells.[provided by RefSeq, Mar 2011]
UniProt Comments for SERPINF1	PEDF: a secreted neurotrophic protein that induces extensive neuronal differentiation in retinoblastoma cells. Potent inhibitor 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. The N-terminal (AA 44-121) exhibits neurite outgrowth-inducing activity. The C-terminal exposed loop (AA 382-418) is essential for serpin activity. Extracellular phosphorylation enhances antiangiogenic activity. Protein type: Inhibitor; Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: 17p13.3 Cellular Component: axon hillock; extracellular matrix; extracellular space; perinuclear region of cytoplasm; extracellular region; melanosome; basement membrane Molecular Function: serine-type endopeptidase inhibitor activity Biological Process: cell proliferation; positive regulation of neurogenesis; negative regulation of angiogenesis; ovulation cycle; retina development in camera-type eye; short-term memory; negative regulation of inflammatory response; response to arsenic; multicellular organismal development; response to acidity; kidney development; aging Disease: Osteogenesis Imperfecta, Type Vi
Research Articles on SERPINF1	**1.** Expressional change of PEDF and TNF-alpha is in relation to angiogenesis of bladder tumor
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