

32-20424: Recombinant Human PEDF(Discontinued)

Reactivity : Rat

Alternative Name : Pigment epithelium-derived factor, SerpinF1, EPC-1

Description

Source: **E.coli** PEDF is a noninhibitory serpin with neurotrophic, anti-angiogenic, and anti-tumorigenic properties. It is a 50 kDa glycoprotein produced and secreted in many tissues throughout the body. A major component of the anti-angiogenic action of PEDF is the induction of apoptosis in proliferating endothelial cells. In addition, PEDF is able to inhibit the activity of angiogenic factors, such as VEGF and FGF-2. The neuroprotective effects of PEDF are achieved through suppression of neuronal apoptosis induced by peroxide, glutamate, or other neurotoxins. The recent identification of a lipase-linked cell membrane receptor for PEDF (PEDF-R) that binds to PEDF with high affinity (1) should facilitate further elucidation of the underlying mechanisms of this pluripotent serpin. To date, PEDF-R is the only signaling receptor known to be used by a serpin family member. The unique range of PEDF activities implicate it as a potential therapeutic agent for the treatment of vasculature-related neurodegenerative diseases, such as age-related macular degeneration (AMD) and proliferative diabetic retinopathy (PDR). PEDF also has the potential to be useful in the treatment of various angiogenesis-related diseases including a number of cancers. Recombinant Human PEDF is a 44.5 kDa non-glycosylated protein containing 400 amino acid residues. (1) Notari, I. et al. J Biol Chem., Vol. 281, 38022-38037.

Product Info

Amount : 5 µg / 20 µg

Purification : Purity: >= 90% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : MQNPASPPEE GSPDPDSTGA LVEEEDPFFK VPVNKLAAAV SNFGYDLYRV RSSMSPTTNV LLSPLSVATA
LSALSLGAEQ RTESIIHRAL YYDLISSPDI HGTYKELLDV VTAPQKNLKS ASRIVFEKKL RIKSSFVAPL
EKSYGTRPRV LTGNPRDLQ EINNWWQAQM KGKLARSTKE IPDEISILL GVAHFKGQWV TKFDSRKTS
EDFYLDEERT VRVPMMSDPK AVLRVGLDSD LSCKIAQLPL TGSMISIFFL PLKVTQNLTL IEESLTSEFI
HDIDRELKTV QAVLTVPKLK LSYEGEVTKS LQEMKLQSLF DSPDFSKITG KPIKLTQVEH RAGFEWNEDG
AGTTPSPGLQ PAHLTFPLDY HLNQPFIFVL RDTDTGALLF IKGILDPRGP