

Recombinant Protein Technical Manual Recombinant Rat SerpinF1/PEDF Protein (His Tag)

RPES4113

Product Data:

Product SKU: RPES4113 Size: 20μg

Species: Rat Expression host: HEK293 Cells

Uniprot: NP 808788.1

Protein Information:

Molecular Mass: 45.9 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Dmrs91

Immunogen Information:

Sequence: Met1-Thr418

Background:

Pigment epithelium-derived factor, also known as PEDF, Serpin F1, and SERPINF1, is a multiple functional protein which has both anti-angiogenic activity and neurotrophic activity at the same time. PEDF is a secreted glycoprotein that belongs to the noninhibitory serpin. It has an alpha/beta core serine-protease inhibitor domain, three major beta-sheets, and ten alpha-helices. PEDF does not inhibit either serine or cysteine proteinases. PEDF exerts diverse physiological activities including anti-angiogenesis, anti-vasopermeability, anti-tumor, and neurotrophic activities. PEDF acts via multiple high affinity ligands and cell receptors. It has been described as a natural angiogenesis inhibitor with neurotrophic and immune-modulation properties. PEDF induces macrophages apoptosis and necrosis through the activation of peroxisome proliferator-activated receptor-gamma by which PEDF could modulate inflammatory reactions in septic shock. It balances angiogenesis in the eye and blocks tumor progression.