



# Recombinant Protein Technical Manual

## Recombinant Mouse Serpin F1/PEDF Protein (His Tag)(Active)

RPES3563

### Product Data:

**Product SKU:** RPES3563

**Size:** 20µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_035470.3

### Protein Information:

**Molecular Mass:** 45.8 kDa

**AP Molecular Mass:** 60-65 kDa

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized mouse SERPINF1-His at 10 µg/ml (100 µl/well) can bind biotinylated human GST-CSNK2A1 with a linear range of 0.31-2.5 µg/ml.

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the 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:** Functional ELISA

**Synonyms:** AI195227 Protein, Mouse;EPC Protein, Mouse;Pedf Protein, Mouse;Pedfl Protein, Mouse;Sdf3 Protein, Mouse

## Immunogen Information:

**Sequence:** Met 1-Thr 417

## 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.