



# Recombinant Protein Technical Manual

## Recombinant Human SerpinF1/PEDF Protein (His Tag)

RPES4718

### Product Data:

**Product SKU:** RPES4718

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P36955

### Protein Information:

**Molecular Mass:** 45.4 kDa

**AP Molecular Mass:** 50 kDa

**Tag:** C-6His

**Bio-activity:**

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

**Endotoxin:** < 1.0 EU per µg 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 a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 8.0.

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

**Application:**

**Synonyms:** Pigment Epithelium-Derived Factor; PEDF; Cell Proliferation-Inducing Gene 35 Protein; EPC; Serpin F1; SERPINF1; PEDF;OI12;OI6;PEDF;PIG35

## Immunogen Information:

**Sequence:** Gln20-Pro418

## Background:

Serpin F1 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. As protease inhibitors, serpins have an array of functions including regulating blood clotting, the complement pathway, extracellular matrix remodeling, and cell motility. They are also involved in activities that extend beyond their ability to inhibit proteases. For instance, they may also regulate blood pressure, angiogenesis, or act as storage/transport proteins. Serpin F1 is a new promising approach for the treatment of osteosarcoma and has been described as a natural angiogenesis inhibitor with neurotrophic and immune-modulation properties. The human serpin superfamily consists of at least 35 members that target not only serine proteases, but also selected cysteine proteases and non-protease proteins. Levels of the natural ocular anti-angiogenic factor SentrinF1 (PEDF) is associated with proliferative retinopathy.