

Human SerpinF1 / PEDF Protein (His Tag)

Catalog Number: 11104-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

EPC-1; OI12; OI6; PEDF; PIG35; AI195227; EPC-1; Pedf; Pedfl; Sdf3

Protein Construction:

A DNA sequence encoding the human SERPINF1 (NP_002606.3) (Met 1-Pro 418) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gln 20

Molecular Mass:

The secreted recombinant human SERPINF1 consists of 410 amino acids with the predicted molecular mass of 45.8 kDa as estimated in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

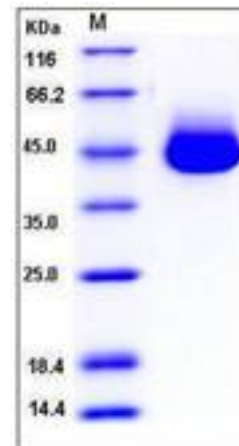
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.

References

1. Ren, JG. et al., 2005, Med Hypotheses. 64 (1): 74-8.
2. Filleur, S. et al., 2009, J Cell Biochem. 106 (5): 769-75.
3. Kawaguchi, T. et al., 2010, Curr Mol Med. 10 (3): 302-11.

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