

# PEDF (H-125): sc-25594

## BACKGROUND

Pigment epithelium-derived growth factor (PEDF), also known as EPC-1 (early population doubling level cDNA-1), is a glycoprotein found naturally in the normal eye. PEDF has reported neuroprotective and differentiation properties and is secreted in abundance by retinal pigment epithelium cells. PEDF belongs to the serine protease inhibitor (serpin) superfamily and has been reported to inhibit angiogenesis and proliferation of several cell types. The "pooling" of PEDF within the interphotoreceptor matrix places this molecule in a prime physical location to affect the underlying neural retina. Additionally, PEDF induces neuronal differentiation and promotes survival of neurons of the central nervous system from degeneration caused by serum withdrawal or glutamate cytotoxicity.

## CHROMOSOMAL LOCATION

Genetic locus: SERPINF1 (human) mapping to 17p13.3; Serpinf1 (mouse) mapping to 11 B5.

## SOURCE

PEDF (H-125) is a rabbit polyclonal antibody raised against amino acids 281-405 of PEDF of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-25594 AC, 500 µg/0.25 ml agarose in 1 ml.

## APPLICATIONS

PEDF (H-125) is recommended for detection of PEDF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PEDF (H-125) is also recommended for detection of PEDF in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PEDF siRNA (h): sc-40947, PEDF siRNA (m): sc-40948, PEDF shRNA Plasmid (h): sc-40947-SH, PEDF shRNA Plasmid (m): sc-40948-SH, PEDF shRNA (h) Lentiviral Particles: sc-40947-V and PEDF shRNA (m) Lentiviral Particles: sc-40948-V.

Molecular Weight of PEDF: 50 kDa.

Positive Controls: PEDF (h2): 293T Lysate: sc-158841, A549 cell lysate: sc-2413 or Y79 cell lysate: sc-2240.

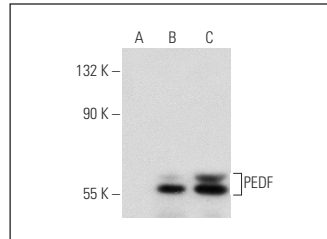
## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

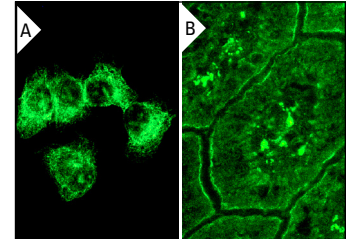
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



PEDF (H-125): sc-25594. Western blot analysis of PEDF expression in non-transfected 293T: sc-117752 (A), human PEDF transfected 293T: sc-158841 (B) and Y79 (C) whole cell lysates.



PPEDF (H-125): sc-25594. Immunofluorescence staining of methanol-fixed A549 cells showing cytoplasmic localization (A) and immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining (B).

## SELECT PRODUCT CITATIONS

- Farkas, L., et al. 2009. VEGF ameliorates pulmonary hypertension through inhibition of endothelial apoptosis in experimental lung fibrosis in rats. *J. Clin. Invest.* 119: 1298-1311.
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- Li, C.M., et al. 2011. Pigment epithelium-derived factor plays an inhibitory role in proliferation and migration of HaCaT cells. *Mol. Biol. Rep.* 38: 2099-2105.
- Samkharadze, T., et al. 2011. Pigment epithelium-derived factor associates with neuropathy and fibrosis in pancreatic cancer. *Am. J. Gastroenterol.* 106: 968-980.
- Jia, C., et al. 2011. Comparison of genome-wide gene expression in suture- and alkali burn-induced murine corneal neovascularization. *Mol. Vis.* 17: 2386-2399.
- Jia, L. and Waxman, D.J. 2013. Thrombospondin-1 and pigment epithelium-derived factor enhance responsiveness of KM12 colon tumor to metronomic cyclophosphamide but have disparate effects on tumor metastasis. *Cancer Lett.* 330: 241-249.
- Chuderland, D., et al. 2013. The role of pigment epithelium-derived factor in the pathophysiology and treatment of ovarian hyperstimulation syndrome in mice. *J. Clin. Endocrinol. Metab.* 98: E258-E266.
- Chuderland, D., et al. 2013. Hormonal regulation of pigment epithelium-derived factor (PEDF) in granulosa cells. *Mol. Hum. Reprod.* 19: 72-81.


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Try **PEDF (D-10): sc-390172** or **PEDF (H-9): sc-390066**, our highly recommended monoclonal alternatives to PEDF (H-125).