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Rabbit Anti-PEDF/Cy5 Conjugated antibody

SL0731R-Cy5

Product Name	Anti-PEDF/Cy5
Chinese Name	Cy5 标记的色素上皮源性因子抗体
Alias	pigment epithelium-derived factor; Serpin-F1; Stromal cell-derived factor 3; SDF-3; Caspin; Alpha 2 antiplasmin; EPC 1; EPC1; PIG 35; PIG35; Pigment epithelium derived factor; Proliferation inducing protein 35; SERPIN F1; Serpin peptidase inhibitor clade F member 1; SERPINF 1; SERPINF1; PEDF_HUMAN.
Research Area	Tumour Cell biology immunology Neurobiology Growth factors and hormones
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat(predicted:Human,Mouse,Dog,Pig,Cow)
Applications	IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	46kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human PEDF C-terminus
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** Pigment epithelium derived factor, originally identified in conditioned medium of cultured human fetal retinal pigment epithelial (RPE) cells, is a neurotrophic protein that induces extensive neuronal differentiation in human

Y79 retinoblastoma cells, a neoplastic counterpart of normal retinoblasts. It has been suggested that PEDF is synthesized by RPE cells and secreted into the retina interphotoreceptor matrix where it may influence development/differentiation of the neural retina. PEDF is a potent inhibitor of angiogenesis. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity. The PEDF gene is a member of the serpin gene family. Serpins are a group of serine protease inhibitors, some of which have also been reported to exhibit neurotrophic activity.

Function:
Neurotrophic protein; induces extensive neuronal differentiation in retinoblastoma cells. Potent inhibitor of angiogenesis. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity.

Subcellular Location:
Secreted. Melanosome. Enriched in stage I melanosomes.

Tissue Specificity:
Retinal pigment epithelial cells and blood plasma.

Post-translational modifications:
The N-terminus is blocked. Extracellular phosphorylation enhances antiangiogenic activity.
N- and O-glycosylated. O-glycosylated with a core 1 or possibly core 8 glycan.

DISEASE:
Defects in SERPINF1 are the cause of osteogenesis imperfecta type 12 (OI12) [MIM:613982]. OI12 is a connective tissue disorder characterized by bone fragility, low bone mass, and recurrent fractures. OI12 is characterized by features compatible with osteogenesis imperfecta type III in the Sillence classification. Patients have normal grayish sclerae and fractures of long bones and severe vertebral compression fractures, with resulting deformities observed as early as the first year of life.

Similarity:
Belongs to the serpin family.

Database links:

Entrez Gene: 5176 Human

Entrez Gene: 20317 Mouse

Omim: 172860 Human

SwissProt: P36955 Human

SwissProt: P97298 Mouse

Unigene: 532768 Human

Unigene: 2044 Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.