

PEDF antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP50882

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P36955
Reactivity	Rat, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46312
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PEDF
Epitope Specificity	201-300/418
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted. Melanosome. Enriched in stage I melanosomes.
SIMILARITY	Belongs to the serpin family.
Post-translational modifications	The N-terminus is blocked. Extracellular phosphorylation enhances antiangiogenic activity.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID 5176

Other Names	Pigment epithelium-derived factor, PEDF, Cell proliferation-inducing gene 35 protein, EPC-1, Serpin F1, SERPINF1, PEDF
Target/Specificity	Retinal pigment epithelial cells and blood plasma.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SERPINF1
Synonyms	PEDF
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.
Cellular Location	Secreted. Melanosome. Note=Enriched in stage I melanosomes
Tissue Location	Retinal pigment epithelial cells and blood plasma.

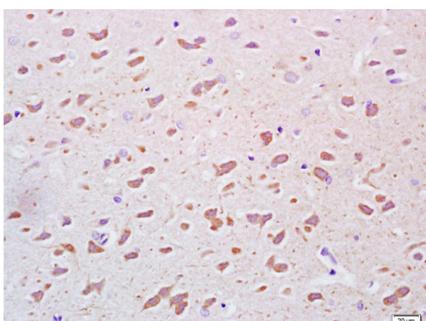
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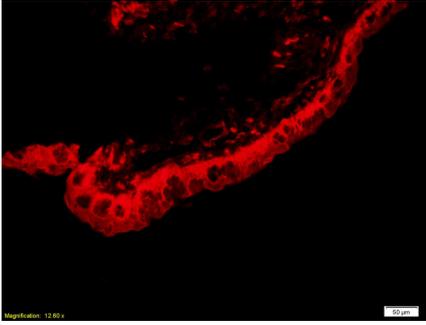
References

- Steele F.R.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:1526-1530(1993).
Tombran-Tink J.,et al.Mol. Vis. 2:11-11(1996).
Yin B.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Kalnina N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Kim J.W.,et al.Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.

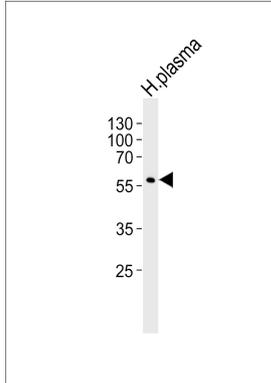
Images



Formalin-fixed and paraffin embedded rat brain tissue labeled Anti-PEGF Polyclonal Antibody, Unconjugated (AP50882) at 1:200, followed by conjugation to the secondary antibody and DAB staining



Formalin-fixed and paraffin embedded rat eye, ciliary body labeled Anti-PEGF Polyclonal Antibody, Unconjugated (AP50882) at 1:200, followed by conjugation to the secondary antibody Goat Anti-Rabbit IgG, Cy3 conjugated used at 1:200 dilution for 40 minutes at 37°C.



Western blot analysis of lysate from human plasma tissue lysate, using PEDF antibody(AP50882). AP50882 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.