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Functional PEDF (human) Antibody, mAb (recombinant)

Catalog # ADP0046

Specification

Functional PEDF (human) Antibody, mAb (recombinant) - Product Information

Application	**WB, E**
Primary Accession	P36955
Reactivity	**Human**
Host	**Purified From HEK 293 Cell culture Supernatant.**
Clonality	**Monoclonal**
Isotype	**Human IgG2λ**
Gene Source	**Human**
Application Note	**E,WB(1:1000)**
Calculated MW	**46312**
Dilution	**WB~~1:1000** **E~~N/A**
Description	**anti-PEDF (human), mAb (rec.) (Serpy-1-4) is composed of human variable regions (VH and VL) (λ-chain) of immunoglobulin fused to the human IgG2 Fc domain.**

Functional PEDF (human) Antibody, mAb (recombinant) - Additional Information

Gene ID 5176

Other Names
Pigment Epithelium-derived Factor; Cell Proliferation-inducing Gene 35 Protein; EPC-1; Serpin F1

Target/Specificity
Recognizes human PEDF.

Format
Liquid. In PBS containing 10% glycerol and 0.02% sodium azide.

Reconstitution & Storage
Stable for at least 1 year after receipt when stored at -20°C.

Precautions
Functional PEDF (human) Antibody, mAb (recombinant) is for research use only and not for use in diagnostic or therapeutic procedures.

Functional PEDF (human) Antibody, mAb (recombinant) - 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.

Functional PEDF (human) Antibody, mAb (recombinant) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Functional PEDF (human) Antibody, mAb (recombinant) - Images

Functional PEDF (human) Antibody, mAb (recombinant) - Background

Pigment epithelium-derived factor (PEDF) is a 47kDa secreted glycoprotein that belongs to the non-inhibitory serpin family group. PEDF is widely expressed in adult and fetal tissues, including brain, spinal cord, plasma, bone, prostate, pancreas, heart and lung. PEDF acts as an angiogenesis inhibitor with neurotrophic, immunomodulation and antitumor properties. It functions as anti-angiogenic agent by counterbalancing the proangiogenic effect of VEGF. PEDF is one of the most abundant proteins released by adipocytes and induces insulin resistance in adipocytes and human skeletal muscle cells. Recently, it has been reported that PEDF is sufficient to maintain the self-renewal of pluripotent human embryonic stem cells. Anti-PEDF (human), mAb (rec.) (Serpy-1-4) is an antibody developed by antibody phage display technology using a human naive antibody gene library. These libraries consist of scFv (single chain fragment variable) composed of VH (variable domain of the human immunoglobulin heavy chain) and VL (variable domain of the human immunoglobulin light chain) connected by a polypeptide linker. The antibody fragments are displayed on the surface of filamentous bacteriophage (M13). This scFv was selected by affinity selection on antigen in a process termed panning. Multiple rounds of panning are performed to enrich for antigen-specific scFv-phage. Monoclonal antibodies are subsequently identified by screening after each round of selection. The selected monoclonal scFv is cloned into an appropriate vector containing a Fc portion of interest and then produced in mammalian cells to generate an IgG like scFv-Fc fusion protein.