

PEDF (h2): 293T Lysate: sc-158841

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. It 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.

REFERENCES

1. Cayouette, M., Smith, S.B., Becerra, S.P. and Gravel, C. 1999. Pigment epithelium-derived factor delays the death of photoreceptors in mouse models of inherited retinal degenerations. *Neurobiol. Dis.* 6: 523-532.
2. Cao, W., Tombran-Tink, J., Chen, W., Mrazek, D., Elias, R. and McGinnis, J.F. 1999. Pigment epithelium-derived factor protects cultured retinal neurons against hydrogen peroxide-induced cell death. *J. Neurosci. Res.* 57: 789-800.
3. Coljee, V.W., Rotenberg, M.O., Tresini, M., Francis, M.K., Cristofalo, V.J. and Sell, C. 2000. Regulation of EPC-1/PEDF in normal human fibroblasts is posttranscriptional. *J. Cell. Biochem.* 79: 442-452.
4. Jablonski, M.M., Tombran-Tink, J., Mrazek, D.A. and Iannaccone, A. 2000. Pigment epithelium-derived factor supports normal development of photoreceptor neurons and opsin expression after retinal pigment epithelium removal. *J. Neurosci.* 20: 7149-7157.
5. Stellmach, V.V., Crawford, S.E., Zhou, W. and Bouck, N. 2001. Prevention of ischemia-induced retinopathy by the natural ocular antiangiogenic agent pigment epithelium-derived factor. *Proc. Natl. Acad. Sci. USA* 98: 2593-2597.

CHROMOSOMAL LOCATION

Genetic locus: SERPINF1 (human) mapping to 17p13.3.

PRODUCT

PEDF (h2): 293T Lysate represents a lysate of human PEDF transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PEDF (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive PEDF antibodies. Recommended use: 10-20 µl per lane.

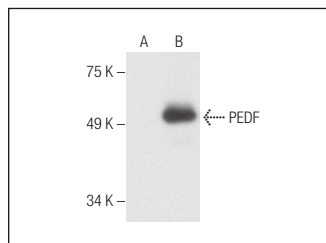
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PEDF (H-9): sc-390066 is recommended as a positive control antibody for Western Blot analysis of enhanced human PEDF expression in PEDF transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

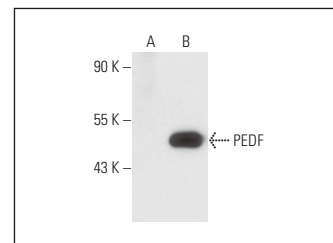
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PEDF (H-9): sc-390066. Western blot analysis of PEDF expression in non-transfected: sc-117752 (A) and human PEDF transfected: sc-158841 (B) 293T whole cell lysates.



PEDF (LL-J): sc-74254. Western blot analysis of PEDF expression in non-transfected: sc-117752 (A) and human PEDF transfected: sc-158841 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.