

PE-1 (N-11): sc-103810

BACKGROUND

PE-1 (PU-Ets related-1), also known as ETV3 (Ets translocation variant 3) or METS (mitogenic Ets transcriptional suppressor), belongs to the Ets family of transcription factors and functions as a transcriptional repressor. Ets family members share a highly conserved DNA binding domain and play a role in growth factor pathways regulating proliferation and differentiation. PE-1 is ubiquitously expressed and localizes to the nucleus. Its expression can be induced by IL-10 via the Stat3 pathway, suggesting that PE-1 contributes to the IL-10 downstream anti-inflammatory effects. During terminal cell differentiation, PE-1 plays a role in growth arrest by specifically repressing the target genes that are involved in Ras-dependent proliferation. The contributions of PE-1 to these anti-proliferative effects are heavily dependent on its interaction with Gemin3. Two PE-1 isoforms exist due to alternative splicing events.

REFERENCES

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2. de Castro, C.M., et al. 1997. Genomic structure and chromosomal localization of the novel Ets factor, PE-2 (ERF). *Genomics* 42: 227-235.
3. Bidder, M., et al. 2000. Ets domain transcription factor PE-1 suppresses human interstitial collagenase promoter activity by antagonizing protein-DNA interactions at a critical AP1 element. *Biochemistry* 39: 8917-8928.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 164873. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Sawka-Verhelle, D., et al. 2004. PE-1/METS, an antiproliferative Ets repressor factor, is induced by CREB-1/CREM-1 during macrophage differentiation. *J. Biol. Chem.* 279: 17772-17784.
6. El Kasmi, K.C., et al. 2007. Cutting edge: A transcriptional repressor and corepressor induced by the Stat3-regulated anti-inflammatory signaling pathway. *J. Immunol.* 179: 7215-7219.
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CHROMOSOMAL LOCATION

Genetic locus: ETV3 (human) mapping to 1q23.1; Etv3l (mouse) mapping to 3 F1.

SOURCE

PE-1 (N-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PE-1 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.

Blocking peptide available for competition studies, sc-103810 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PE-1 (N-11) is recommended for detection of PE-1 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).

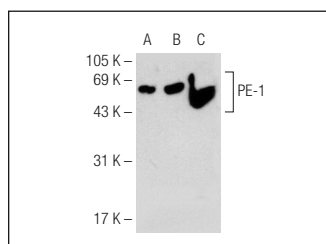
PE-1 (N-11) is also recommended for detection of PE-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PE-1 siRNA (h): sc-88114, PE-1 siRNA (m): sc-106394, PE-1 shRNA Plasmid (h): sc-88114-SH, PE-1 shRNA Plasmid (m): sc-106394-SH, PE-1 shRNA (h) Lentiviral Particles: sc-88114-V and PE-1 shRNA (m) Lentiviral Particles: sc-106394-V.

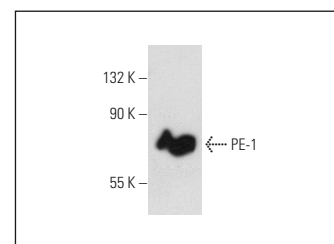
Molecular Weight of PE-1: 57 kDa.

Positive Controls: PE-1 (m): 293T Lysate: sc-122477, HeLa whole cell lysate: sc-2200 or SK-MEL-28 cell lysate: sc-2236.

DATA



PE-1 (N-11): sc-103810. Western blot analysis of PE-1 expression in non-transfected 293T: sc-117752 (A), mouse PE-1 transfected 293T: sc-122477 (B) and SK-MEL-28 (C) whole cell lysates.



PE-1 (N-11): sc-103810. Western blot analysis of PE-1 expression in HeLa whole cell lysate.

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.

PROTOCOLS

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



Try **PE-1 (ETV3F4D10): sc-81084**, our highly recommended monoclonal alternative to PE-1 (N-11).