

## PE-1 (H-172): sc-98372

### 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

1. Klemsz, M., Hromas, R., Raskind, W., Bruno, E. and Hoffman, R. 1994. PE-1, a novel Ets oncogene family member, localizes to chromosome 1q21-q23. *Genomics* 20: 291-294.
2. de Castro, C.M., Rabe, S.M., Langdon, S.D., Fleenor, D.E., Slentz-Kesler, K., Ahmed, M.N., Qumsiyeh, M.B. and Kaufman, R.E. 1997. Genomic structure and chromosomal localization of the novel Ets factor, PE-2 (ERF). *Genomics* 42: 227-235.
3. Bidder, M., Loewy, A.P., Latifi, T., Newberry, E.P., Ferguson, G., Willis, D.M. and Towler, D.A. 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<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 164873. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

### CHROMOSOMAL LOCATION

Genetic locus: ETV3 (human) mapping to 1q23.1.

### SOURCE

PE-1 (H-172) is a rabbit polyclonal antibody raised against amino acids 142-313 mapping within an internal region 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98372 X, 200 µg/0.1 ml.

### 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.

### APPLICATIONS

PE-1 (H-172) is recommended for detection of PE-1 of 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 (H-172) is also recommended for detection of PE-1 in additional species, including equine, canine, bovine and porcine.

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

PE-1 (H-172) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

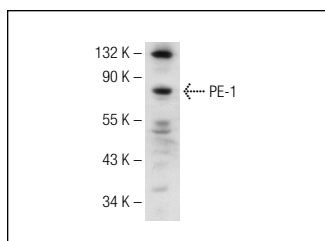
Molecular Weight of PE-1: 57 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SK-MEL-28 cell lysate: sc-2236 or HL-60 whole cell lysate: sc-2209.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

### DATA



PE-1 (H-172): sc-98372. Western blot analysis of PE-1 expression in HeLa whole cell lysate.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.