

EEPD1 (A-5): sc-398028

BACKGROUND

EEPD1 (endonuclease/exonuclease/phosphatase family domain containing 1), also known as HSPC107, is a 569 amino acid protein that contains one Hh domain. A significant decrease in the relative transcriptional level of EEPD1 is induced by long-term heat stress exposure. Conversely, EEPD1 is up-regulated in bovine adipogenic processes related to intramuscular preadipocyte differentiation. Encoded by a gene that maps to human chromosome 7p14.2, EEPD1 plays a role in DNA binding and repair. Chromosome 7 makes up about 5% of the human genome and contains 158 million bases encoding more than 1,000 genes. Osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome are associated with chromosome 7.

REFERENCES

1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the proc α 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. *J. Clin. Invest.* 72: 1262-1267.
2. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. *Nature* 424: 157-164.
3. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. *Neuromolecular Med.* 8: 547-565.
4. Brezinová, J., et al. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. *Cancer Genet. Cytogenet.* 173: 10-16.
5. Leone, G., et al. 2007. Therapy-related leukemia and myelodysplasia: susceptibility and incidence. *Haematologica* 92: 1389-1398.

CHROMOSOMAL LOCATION

Genetic locus: EEPD1 (human) mapping to 7p14.2; Eepd1 (mouse) mapping to 9 A4.

SOURCE

EEPD1 (A-5) is a mouse monoclonal antibody raised against amino acids 501-569 mapping at the C-terminus of EEPD1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EEPD1 (A-5) is available conjugated to agarose (sc-398028 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398028 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398028 PE), fluorescein (sc-398028 FITC), Alexa Fluor® 488 (sc-398028 AF488), Alexa Fluor® 546 (sc-398028 AF546), Alexa Fluor® 594 (sc-398028 AF594) or Alexa Fluor® 647 (sc-398028 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398028 AF680) or Alexa Fluor® 790 (sc-398028 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

EEPD1 (A-5) is recommended for detection of EEPD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for EEPD1 siRNA (h): sc-89330, EEPD1 siRNA (m): sc-143299, EEPD1 shRNA Plasmid (h): sc-89330-SH, EEPD1 shRNA Plasmid (m): sc-143299-SH, EEPD1 shRNA (h) Lentiviral Particles: sc-89330-V and EEPD1 shRNA (m) Lentiviral Particles: sc-143299-V.

Molecular Weight of EEPD1: 62 kDa.

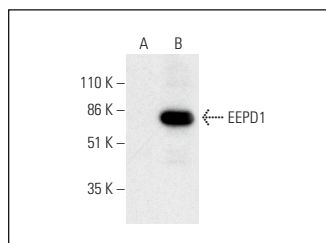
Positive Controls: EEPD1 (h): 293T Lysate: sc-116976 or BC₃H1 cell lysate: sc-2299.

RECOMMENDED SUPPORT REAGENTS

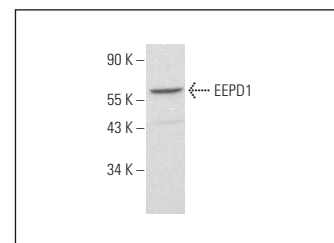
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-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.
- 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



EEPD1 (A-5): sc-398028. Western blot analysis of EEPD1 expression in non-transfected: sc-117752 (A) and human EEPD1 transfected: sc-116976 (B) 293T whole cell lysates.



EEPD1 (A-5): sc-398028. Western blot analysis of EEPD1 expression in BC₃H1 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 for detailed protocols and support products.