SANTA CRUZ BIOTECHNOLOGY, INC.

EEPD1 (Q-13): sc-138253



BACKGROUND

EEPD1 (endonuclease/exonuclease/phosphatase family domain containing 1), also known as HSPC107, is a 569 amino acid protein that contains one HhH 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 pro 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.
- 6. Trevisan, M., et al. 2009. Human cytomegalovirus productively infects adrenocortical cells and induces an early cortisol response. J. Cell. Physiol. 221: 629-641.
- 7. Mizoguchi, Y., et al. 2010. Differentially expressed genes during bovine intramuscular adipocyte differentiation profiled by serial analysis of gene expression. Anim. Genet. 41: 436-441.
- 8. Goto, K., et al. 2010. Responses of muscle mass, strength and gene transcripts to long-term heat stress in healthy human subjects. Eur. J. Appl. Physiol. 111: 17-27.
- 9. Dubinsky, M.C., et al. 2010. Genome wide association (GWA) predictors of anti-TNF α therapeutic responsiveness in pediatric inflammatory bowel disease. Inflamm. Bowel Dis. 16: 1357-1366.

CHROMOSOMAL LOCATION

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

SOURCE

EEPD1 (Q-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of EEPD1 of human origin.

PRODUCT

Each vial contains 100 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-138253 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-138253 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EEPD1 (Q-13) is recommended for detection of EEPD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EEPD1 (Q-13) is also recommended for detection of EEPD1 in additional species, including equine, canine, bovine and porcine.

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.

EEPD1 (Q-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of EEPD1: 62 kDa.

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[™] compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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[™] Mounting Medium: sc-24941.

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.

MONOS Satisfation Guaranteed

Try EEPD1 (B-5): sc-398019 or EEPD1 (A-5): sc-398028, our highly recommended monoclonal alternatives to EEPD1 (Q-13)