

LRF (E-15): sc-34510

BACKGROUND

LRF, formerly identified as Pokemon, is a poxvirus zinc finger (POZ) domain-containing transcription factor that influences cell differentiation. LRF (for leukemia/lymphoma related factor) is also known as zinc finger and BTB domain containing 7A, ZBTB7, TIP21, FBI1 and FBI-1. POZ-domain transcription factors contain a POZ or BTB type protein-protein interaction domain at their N-terminus and kruppel-type zinc fingers at their C-terminus. LRF is inducible during both murine and human preadipocyte differentiation and may contribute to adipogenesis through influencing the switch from cellular proliferation to terminal differentiation. LRF can associate with active chromatin and stimulate TAT-activated HIV-1 transcription through interactions with the HIV-1 long terminal repeat. 3T3L1 cells stably overexpressing LRF show a reduction in DNA synthesis and in expression of cyclin A, cyclin-dependent kinase 2 and p107.

REFERENCES

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2. Kukita, A., et al. 1999. Osteoclast-derived zinc finger (OCZF) protein with POZ domain, a possible transcriptional repressor, is involved in osteoclastogenesis. *Blood* 94: 1987-1997.
3. Pendergrast, P.S., et al. 2002. FBI-1 can stimulate HIV-1 TAT activity and is targeted to a novel subnuclear domain that includes the TAT-P-TEFb-containing nuclear speckles. *Mol. Biol. Cell* 13: 915-929.
4. Lee, D.K., et al. 2002. POZ domain transcription factor, FBI-1, represses transcription of ADH5/FDH by interacting with the zinc finger and interfering with DNA binding activity of Sp1. *J. Biol. Chem.* 277: 26761-26768.
5. Pessler, F., et al. 2003. Flexible DNA binding of the BTB/POZ-domain protein FBI-1. *J. Biol. Chem.* 278: 29327-29335.
6. Laudes, M., et al. 2004. Role of the POZ zinc finger transcription factor FBI-1 in human and murine adipogenesis. *J. Biol. Chem.* 279: 11711-11718.
7. Maeda, T., et al. 2005. Role of the proto-oncogene Pokemon in cellular transformation and ARF repression. *Nature* 433: 278-285.

CHROMOSOMAL LOCATION

Genetic locus: ZBTB7A (human) mapping to 19p13.3; Zbtb7a (mouse) mapping to 10 C1.

SOURCE

LRF (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LRF of human origin.

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.

PRODUCT

Each vial contains 200 µg IgG 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-34510 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-34510 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LRF (E-15) is recommended for detection of LRF 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).

LRF (E-15) is also recommended for detection of LRF in additional species, including canine, bovine and porcine.

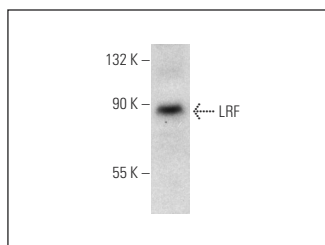
Suitable for use as control antibody for LRF siRNA (h): sc-44574, LRF siRNA (m): sc-44575, LRF shRNA Plasmid (h): sc-44574-SH, LRF shRNA Plasmid (m): sc-44575-SH, LRF shRNA (h) Lentiviral Particles: sc-44574-V and LRF shRNA (m) Lentiviral Particles: sc-44575-V.

LRF (E-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of LRF: 72 kDa.

Positive Controls: Hep G2 nuclear extract: 364819 or Hs68 cell lysate: sc-2230.

DATA



LRF (E-15): sc-34510. Western blot analysis of LRF expression in Hep G2 nuclear extract.

PROTOCOLS

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

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Try **LRF (13E9): sc-33683** or **LRF (H-6): sc-393012**, our highly recommended monoclonal alternatives to LRF (E-15).