SANTA CRUZ BIOTECHNOLOGY, INC.

RFLAT-1 (A-12): sc-32617



BACKGROUND

RANTES factor of late activated T lymphocytes-1 (RFLAT-1), also designated BTEB3 and Krüppel-like factor 13 (KLF13), is a novel transcription factor that is expressed in T cells in the late stages of activation. This delayed induction coincides with the expression of RANTES, a chemoattractant cytokine for monocytes, T lymphocytes, eosinophils, basophils and natural killer cells. RFLAT-1 is localized to the nucleus, where it associates with the A site of the RANTES promoter and, in turn, faciliates transcriptional activation. RFLAT-1 is related to the transcription factor TFIIA-like zinc finger protein superfamily, as it contains three distinct and contigous zinc finger motifs at the carboxy- terminus and a proline-rich transcriptional activation domain, which are also present in TFIIA family of proteins, including Sp1 and Sp3. Although RFLAT-1 activates gene-specific transcription in activated T cells, it is also ubiquitously expressed in various cell types where it is likely regulated by phosphorylation. Late stage transcriptional activation of RANTES in activated T cells is also strongly influenced by Rel proteins of the NFkB family, suggesting that RFLAT-1 and Rel may synergistically activate the RANTES promoter.

REFERENCES

- Kikuchi, Y., et al. 1996. Purification and characterization of the DNA-binding domain of BTEB, a GC box-binding transcription factor, expressed in *Escherichia coli*. J. Biochem. 119: 309-313.
- Wang, Y., et al. 1997. Cell-type expression, immunolocalization, and deoxyribonucleic acid-binding activity of basic transcription element binding transcription factor, an Sp-related family member, in porcine endometrium of pregnancy. Biol. Reprod. 57: 707-714.
- Lania, L., et al. 1997. Transcriptional regulation by the Sp family proteins. Int. J. Biochem. Cell Biol. 29: 1313-1323.

CHROMOSOMAL LOCATION

Genetic locus: KLF13 (human) mapping to 15q13.3; Klf13 (mouse) mapping to 7 C.

SOURCE

RFLAT-1 (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RFLAT-1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32617 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-32617 X, 200 μ g/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.

APPLICATIONS

RFLAT-1 (A-12) is recommended for detection of RFLAT-1 of mouse and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RFLAT-1 (A-12) is also recommended for detection of RFLAT-1 in additional species, including bovine and porcine.

Suitable for use as control antibody for RFLAT-1 siRNA (h): sc-38234, RFLAT-1 siRNA (m): sc-38235, RFLAT-1 shRNA Plasmid (h): sc-38234-SH, RFLAT-1 shRNA Plasmid (m): sc-38235-SH, RFLAT-1 shRNA (h) Lentiviral Particles: sc-38234-V and RFLAT-1 shRNA (m) Lentiviral Particles: sc-38235-V.

RFLAT-1 (A-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RFLAT-1: 38 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or RFLAT-1 (m): 293T Lysate: sc-179413.

DATA





of formalin fixed, paraffin-embedded human bone

marrow tissue showing nuclear staining of

hematopoietic cells

RFLAT-1 (A-12): sc-32617. Western blot analysis of RFLAT-1 expression in non-transfected: sc-117752 (A) and mouse RFLAT-1 transfected: sc-179413 (B) 293T whole cell lysates.

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.

MONOS Satisfation Guaranteed
Try RFLAT-1 (IP-2): sc-130454, our highly recommended monoclonal alternative to RFLAT-1 (A-12).