

RFLAT-1 (G-13): sc-32616

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, facilitates transcriptional activation. RFLAT-1 is related to the transcription factor TFIIA-like zinc finger protein superfamily, as it contains three distinct and contiguous 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 NF κ B family, suggesting that RFLAT-1 and Rel may synergistically activate the RANTES promoter.

REFERENCES

1. 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.
2. 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.

CHROMOSOMAL LOCATION

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

SOURCE

RFLAT-1 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RFLAT-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-32616 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-32616 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

RFLAT-1 (G-13) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

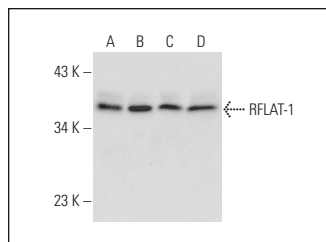
Suitable for use as control antibody for RFLAT-1 siRNA (h): sc-38234, RFLAT-1 siRNA (m): sc-38235, RFLAT-1 shRNA Plasmid (h): sc-38234-SH, RFLAT-1 shRNA Plasmid (m): sc-38235-SH, RFLAT-1 shRNA (h) Lentiviral Particles: sc-38234-V and RFLAT-1 shRNA (m) Lentiviral Particles: sc-38235-V.

RFLAT-1 (G-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

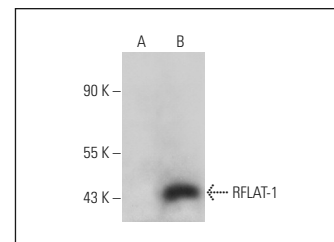
Molecular Weight of RFLAT-1: 38 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, LADMAC whole cell lysate: sc-364189 or RFLAT-1 (m): 293T Lysate: sc-179413.

DATA



RFLAT-1 (G-13): sc-32616. Western blot analysis of RFLAT-1 expression in K-562 (A), LADMAC (B), HUT 78 (C) and Hep G2 (D) whole cell lysates.



RFLAT-1 (G-13): sc-32616. 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.

SELECT PRODUCT CITATIONS

1. Henson, B.J., et al. 2009. Decreased expression of miR-125b and miR-100 in oral cancer cells contributes to malignancy. *Genes Chromosomes Cancer* 48: 569-582.
2. Henson, B.J. and Gollin, S.M. 2010. Overexpression of KLF13 and FGFR3 in oral cancer cells. *Cytogenet. Genome Res.* 128: 192-198.

PROTOCOLS

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

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Try **RFLAT-1 (IP-2): sc-130454**, our highly recommended monoclonal alternative to RFLAT-1 (G-13).