

RFLAT-1 (A-19): sc-9605

BACKGROUND

RANTES factor of late activated T lymphocytes-1 (RFLAT-1), also designated BTEB3 and Kruppel-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.

CHROMOSOMAL LOCATION

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

SOURCE

RFLAT-1 (A-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-9605 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-9605 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RFLAT-1 (A-19) is recommended for detection of RFLAT-1 of mouse, rat 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). RFLAT-1 (A-19) is also recommended for detection of RFLAT-1 in additional species, including canine, 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-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

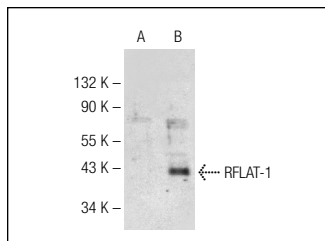
Molecular Weight of RFLAT-1: 38 kDa.

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

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



RFLAT-1 (A-19): sc-9605. 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

- Natesampillai, S., et al. 2006. A novel functional interaction between the Sp1-like protein KLF13 and SREBP-Sp1 activation complex underlies regulation of low density lipoprotein receptor promoter function. *J. Biol. Chem.* 281: 3040-3047.
- Ahn, Y.T., et al. 2007. Dynamic interplay of transcriptional machinery and chromatin regulates "late" expression of the chemokine RANTES in T lymphocytes. *Mol. Cell. Biol.* 27: 253-266.
- Pabona, J.M., et al. 2010. Functional differentiation of uterine stromal cells involves cross-regulation between bone morphogenetic protein 2 and Kruppel-like factor (KLF) family members KLF9 and KLF13. *Endocrinology* 151: 3396-3406.
- Hu, Q., et al. 2011. Functional differentiation of uterine stromal cells involves cross-regulation between bone morphogenetic protein 2 and Kruppel-like factor (KLF) family members KLF9 and KLF13. *Brain Res.* 1367: 347-359.

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.



Try **RFLAT-1 (IP-2): sc-130454**, our highly recommended monoclonal alternative to RFLAT-1 (A-19).