

RFLAT-1 (C-19): sc-9606

BACKGROUND

RANTES factor of late activated T lymphocytes-1 (RFLAT-1) 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

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- Conconi, A., Liu, X., Koriazova, L., Ackerman, E.J. and Smerdon, M.J. 1999. Tight correlation between inhibition of DNA repair *in vitro* and transcription factor IIIA binding in a 5S ribosomal RNA gene. *EMBO J.* 18: 1387-1396.
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- Kuo, C.T. and Leiden, J.M. 1999. Transcriptional regulation of T lymphocyte development and function. *Annu. Rev. Immunol.* 17:149-187.

CHROMOSOMAL LOCATION

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

RESEARCH USE

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

SOURCE

RFLAT-1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at 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.

Blocking peptide available for competition studies, sc-9606 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-9606 X, 200 μ g/0.1 ml.

APPLICATIONS

RFLAT-1 (C-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), 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 (C-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 (C-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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Huang, B. and Ahn, Y.T. 2007. Interaction of PRP4 with Krüppel-Like Factor 13 Regulates CCL5 Transcription. *J. Immunol.* 178: 7081-7087.

STORAGE

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