SANTA CRUZ BIOTECHNOLOGY, INC.

I-TAC (FL-94): sc-28874

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

IFN-inducible T cell α chemoattractant (I-TAC), also designated βR1, H174, SCYB9B, Scyb11 (mouse), IP-9 or CXCL11, is a member of the CXC chemokine family and is expressed in IFN-γ-treated astrocytes, monocytes, keratinocytes, bronchial epithelial cells and neutrophils. The gene encoding I-TAC maps to human chromosome 4q21.1. I-TAC and two related proteins, IFN-induced protein of 10 kDa (IP-10) and monokine induced by IFN-γ (MIG), belong to the non-glutamate-leucine-arginine motif CXC chemokine family and act solely through the CXCR-3 receptor for potent attraction of T lymphocytes. I-TAC is assumed to be involved in inflammatory diseases characterized by the presence of activated T cells.

REFERENCES

1. Mach, F., et al. 1999. Differential expression of three T lymphocyte-activating CXC chemokines by human atheroma-associated cells. J. Clin. Invest. 104: 1041-1050.
2. Tensen, C.P., et al. 1999. Genomic organization, sequence and transcriptional regulation of the human CXCL11(1) gene. Biochim. Biophys. Acta 1446: 167-172.
3. Meyer, M., et al. 2000. Cloning, genomic sequence and chromosome mapping of Scyb11, the murine homologue of SCYB11 (alias βR1/H174/SCYB9B/ I-TAC/IP-9/ CXCL11). Cytogenet. Cell Genet. 88: 278-282.
4. Mazanet, M.M., et al. 2000. Expression of IFN-inducible T cell α chemoattractant by human endothelial cells is cyclosporin A-resistant and promotes T cell adhesion: implications for cyclosporin A-resistant immune inflammation. J. Immunol. 164: 5383-5388.

CHROMOSOMAL LOCATION

Genetic locus: CXCL11 (human) mapping to 4q21.1; Cxcl11 (mouse) mapping to 5 E2.

SOURCE

I-TAC (FL-94) is a rabbit polyclonal antibody raised against amino acids 1-94 representing full length I-TAC of human origin.

PRODUCT

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

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.

PROTOCOLS

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

APPLICATIONS

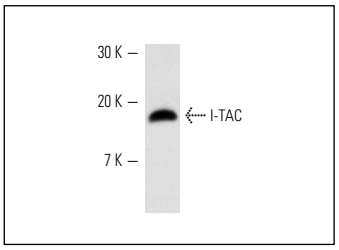
I-TAC (FL-94) is recommended for detection of I-TAC of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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).

Suitable for use as control antibody for I-TAC siRNA (h): sc-45530, I-TAC siRNA (m): sc-39355, I-TAC shRNA Plasmid (h): sc-45530-SH, I-TAC shRNA Plasmid (m): sc-39355-SH I-TAC shRNA (h) Lentiviral Particles: sc-45530-V and I-TAC shRNA (m) Lentiviral Particles: sc-39355-V.

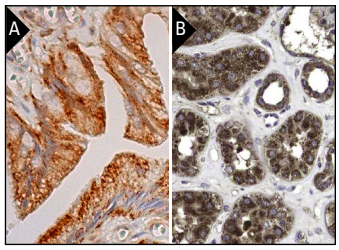
Molecular Weight of I-TAC: 9 kDa.

Positive Controls: human kidney extract: sc-363764 or human PBL whole cell lysate.

DATA



I-TAC (FL-94): sc-28874. Western blot analysis of I-TAC expression in human PBL whole cell lysate.



I-TAC (FL-94): sc-28874. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (**B**).

SELECT PRODUCT CITATIONS

1. Müssig, K., et al. 2009. Association of type 2 diabetes candidate polymorphisms in KCNQ1 with incretin and Insulin secretion. Diabetes 58: 1715-1720.
2. 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.
3. Hosomi, S., et al. 2011. Increased numbers of immature plasma cells in peripheral blood specifically overexpress chemokine receptor CXCR3 and CXCR4 in patients with ulcerative colitis. Clin. Exp. Immunol. 163: 215-224.