SANTA CRUZ BIOTECHNOLOGY, INC.

TARC (N-20): sc-12271

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

Chemokines have been implicated in the regulation of stem/progenitor cell proliferation and movement. The C-C chemokines TARC (for thymus and activation-regulated chemokine, also designated small inducible cytokine A17) and MDC (for macrophage-derived chemokine, also designated small inducible cytokine A22 or STCP-1, for stimulated T cell chemotactic protein 1) are expressed in the thymus and spleen. C-C chemokine receptor CCR4, expressed by T helper type 2 polarized cells, is a high affinity receptor for both TARC and MDC. TARC is important in the recognition of skin vasculature by circulating T cells and in directing lymphocytes that are involved in systemic as opposed to intestinal immunity to its target tissues. MDC is involved in chronic inflammation and dendritic cell and lymphocyte homing. MDC and TARC lack suppressive activity against immature subsets of myeloid progenitors, which have been stimulated to proliferate by multiple growth factors.

REFERENCES

1. Broxmeyer, H.E., et al. 1999. Effects of C-C, C-X-C, C and CX3C chemokines on proliferation of myeloid progenitor cells, and insights into SDF-1-induced chemotaxis of progenitors. Ann. N.Y. Acad. Sci. 872: 142-162
2. Campbell, J.J., et al. 1999. The chemokine receptor CCR4 in vascular recognition by cutaneous but not intestinal memory T cells. Nature 400: 776-780.

CHROMOSOMAL LOCATION

Genetic locus: CCL17 (human) mapping to 16q21; Ccl17 (mouse) mapping to 8 C5.

SOURCE

TARC (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TARC 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.

Blocking peptide available for competition studies, sc-12271 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TARC (N-20) is recommended for detection of TARC 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), 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).

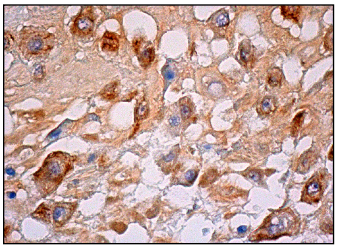
Suitable for use as control antibody for TARC siRNA (h): sc-39369, TARC siRNA (m): sc-39370, TARC shRNA Plasmid (h): sc-39369-SH, TARC shRNA Plasmid (m): sc-39370-SH, TARC shRNA (h) Lentiviral Particles: sc-39369-V and TARC shRNA (m) Lentiviral Particles: sc-39370-V.

Molecular Weight of TARC: 8 kDa.

STORAGE

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

DATA



TARC (N-20): sc-12271. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells.

SELECT PRODUCT CITATIONS

1. Penna, G., et al. 2002. Cutting edge: differential chemokine production by myeloid and plasmacytoid dendritic cells. J. Immunol. 169: 6673-6676.
2. Tsunemi, Y., et al. 2006. CCL17 transgenic mice show an enhanced Th2-type response to both allergic and non-allergic stimuli. Eur. J. Immunol. 36: 2116-2127.
3. Byrne, A.M., et al. 2009. Identification of glucocorticoid-induced TNF receptor-related protein ligand on keratinocytes: ligation by GITR induces keratinocyte chemokine production and augments T-cell proliferation. J. Invest. Dermatol. 129: 2784-2794.
4. Olkhanud, P.B., et al. 2009. Breast cancer lung metastasis requires expression of chemokine receptor CCR4 and regulatory T cells. Cancer Res. 69: 5996-6004.
5. Sorrentino, C., et al. 2011. Androgen deprivation boosts prostatic infiltration of cytotoxic and regulatory T lymphocytes and has no effect on disease-free survival in prostate cancer patients. Clin. Cancer Res. 17: 1571-1581.
6. Marri, P.R., et al. 2013. Prognostic significance of pretreatment serum cytokines in classical Hodgkin lymphoma. Clin. Cancer Res.19: 6812-6819.

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.