

# TARC (AB98): sc-80339

## 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.
3. Chvatchko, Y., et al. 2000. A key role for C-C chemokine receptor 4 in lipopolysaccharide-induced endotoxic shock. *J. Exp. Med.* 191: 1755-1764.
4. Matsukawa, A., et al. 2000. Pivotal role of the C-C chemokine, macrophage-derived chemokine, in the innate immune response. *J. Immunol.* 164: 5362-5368.
5. Galli, G., et al. 2000. Macrophage-derived chemokine production by activated human T cells *in vitro* and *in vivo*: preferential association with the production of type 2 cytokines. *Eur. J. Immunol.* 30: 204-210.

## CHROMOSOMAL LOCATION

Genetic locus: CCL17 (human) mapping to 16q21.

## SOURCE

TARC (AB98) is a mouse monoclonal antibody raised against mature full length recombinant TARC of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

TARC (AB98) is recommended for detection of TARC of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), flow cytometry (1 µg per 1 x 10<sup>6</sup> cells) 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 shRNA Plasmid (h): sc-39369-SH and TARC shRNA (h) Lentiviral Particles: sc-39369-V.

Molecular Weight of TARC: 8 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## SELECT PRODUCT CITATIONS

1. Ko, L.W., et al. 2008. Aggregates assembled from overexpression of wild-type α-synuclein are not toxic to human neuronal cells. *J. Neuropathol. Exp. Neurol.* 67: 1084-1096.

## RESEARCH USE

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