

TARC/CCL17

Catalog # PVGS1237

Product Information

Primary Accession Q9WUZ6
Species Mouse

Sequence Ala24-Pro93

Purity > 97% as analyzed by SDS-PAGE

> 97% as analyzed by HPLC

Endotoxin Level

Biological Activity Fully biologically active when compared to standard. The biologically active

determined by a chemotaxis bioassay using human T-lymphocytes is in a

concentration range of 1.0-10.0 ng/ml.

Expression System E. coli

Theoretical Molecular Weight 7.9 kDa

Formulation Lyophilized from a 0.2 \(\text{Im filtered solution in PBS, pH 7.4.} \)

Reconstitution It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a

concentration of 0.1-1.0 mg/ml.

Storage & Stability Upon receiving, this product remains stable for up to 6 months at -70°C or

-20°C. Upon reconstitution, the product should be stable for up to 1 week at

4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID 20295

Other Names C-C motif chemokine 17, ABCD-2, CC chemokine TARC, Small-inducible

cytokine A17, Thymus and activation-regulated chemokine, Ccl17, Tarc

{ECO:0000303|PubMed:10508243}

Target Background Thymus and activation regulated chemokine (TARC) is a novel CC chemokine,

also called CCL17, recently identified using a signal sequence trap method. CCL17 cDNA encodes a highly basic 94 amino acid (a.a.) residue precursor protein with a 23 a.a. residue signal peptide that is cleaved to generate the 71 a.a. residue mature secreted protein. Among CC chemokine family members, CCL17 has approximately 24 - 29% amino acid sequence identity with RANTES, MIP-1α, MIP-1β, MCP-1, MCP-2, MCP-3 and I-309. CCL17 is constitutively expressed in thymus, and at a lower level in lung, colon, and small intestine.

CCL17 is also transiently expressed in stimulated peripheral blood

Protein Information

Name Ccl17

Synonyms Tarc {ECO:0000303 | PubMed:10508243}

Function Chemokine, which displays chemotactic activity for T lymphocytes,

preferentially Th2 cells, but not monocytes or granulocytes. Therefore plays an important role in a wide range of inflammatory and immunological processes (PubMed:10508243, PubMed:10508268). Acts by binding to CCR4 at T cell surface (By similarity). Mediates GM CSE/CSE2 driven pain and

T-cell surface (By similarity). Mediates GM-CSF/CSF2-driven pain and inflammation (PubMed:27525438). In the brain, required to maintain the typical, highly branched morphology of hippocampal microglia under homeostatic conditions. May be important for the appropriate adaptation of microglial morphology and synaptic plasticity to acute lipopolysaccharide (LPS)-induced neuroinflammation (PubMed:30277599). Plays a role in wound

healing, mainly by inducing fibroblast migration into the wound

(PubMed: 21521373).

Cellular Location Secreted

Tissue Location Expressed in primary and secondary lymphoid organs, where it is specifically

produced by a subset of dendritic cells. Not expressed in the spleen (PubMed:12615900). Constitutively expressed in thymus, as well as in the

lung, skin and intestine (PubMed:10508243, PubMed:10508268,

PubMed:12615900). Not expressed in bone marrow-derived macrophages

and activated B cells, nor in thymocytes (PubMed:10508243,

PubMed:10508268). In the brain, predominantly expressed in a subset of

hippocampal CA1 neurons (PubMed:30277599)

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