

TARC/CCL17
Catalog # PVGS1237**Specification**

TARC/CCL17 - Product Information

Primary Accession [Q9WUZ6](#)
Species
Mouse

Sequence
Ala24-Pro93

Purity
> 97% as analyzed by SDS-PAGE
> 97% as analyzed by HPLC

Endotoxin Level
< 1 EU/ µg of protein by LAL method

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 µm 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.

TARC/CCL17 - 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-1 α , MIP-1 β , 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 mononuclear cells.

TARC/CCL17 - 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-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)

TARC/CCL17 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TARC/CCL17 - Images