

TARC/CCL17

Catalog # PVGS1089

Product Information

Primary Accession Q92583
Species Human

Sequence Ala24-Ser94

Purity > 97% as analyzed by SDS-PAGE

> 97% as analyzed by HPLC

Endotoxin Level

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

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 8.1 kDa

Formulation Lyophilized from a 0.2 Im filtered solution in 20 mM PB, pH 7.4, 150 mM

NaCl.

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 6361

Other Names C-C motif chemokine 17, CC chemokine TARC, Small-inducible cytokine A17,

Thymus and activation-regulated chemokine, CCL17, SCYA17, TARC

Target Background CCL17 is a novel CC chemokine recently identified using a signal sequence

trap method. CCL17 cDNA encodes a highly basic 94 amino acid residue precursor protein with a 23 aa residue signal peptide that is cleaved to generate the 71 aa 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. The gene for human CCL17 has been mapped to chromosome 16q13 rather than chromosome 17 where the genes for many human CC chemokines are clustered. 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.

Protein Information

Name CCL17

Synonyms SCYA17, TARC

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:8702936, PubMed:9169480). Acts by binding to CCR4 at

T-cell surface (PubMed: 10540332, PubMed: 9169480). Mediates

GM-CSF/CSF2-driven pain and inflammation (PubMed: <u>27525438</u>). 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 (By similarity). Plays a role in wound healing, mainly by inducing fibroblast migration into the

wound (By similarity).

Cellular Location Secreted

Tissue Location Constitutively expressed in thymus. Detected at lower levels in the lung, colon

and small intestine (PubMed:8702936) Expressed in stimulated peripheral blood mononuclear cells, but not in resting cells (PubMed:8702936).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.