

Recombinant Human Thymus & Activation Regulated Chemokine (rh TARC / rh CCL17)

Synonyms: Small-inducible cytokine A17, CC chemokine TARC, ABCD-2, SCYA17,

Introduction: TARC cDNA encodes a 94 amino acid precursor protein with a 23 amino acid residue signal peptide that is cleaved off to generate the 71 amino acid residue mature secreted protein. Along with CC chemokine family members, CCL-17 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. TARC is expressed in thymus, and at a lower level in the lung, colon, and small intestine. TARC is in addition transiently expressed in stimulated peripheral blood mononuclear cells. Recombinant TARC has been shown to be chemotactic for T cell lines but not monocytes or neutrophils. It was recently identified to be a specific functional ligand for CCR4, a receptor that is selectively expressed on T cells. TARC is one of quite a few Cys-Cys (CC) cytokine genes clustered on the q arm of chromosome 16, shows chemotactic activity for T lymphocytes, but not monocytes or granulocytes and binds to chemokine receptors CCR4 and CCR8. This chemokine plays important roles in T cell development in thymus as well as in trafficking and activation of mature T cells.

Description: Recombinant human TARC produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 71 amino acids and having a molecular mass of 8 kDa. The TARC is purified by proprietary chromatographic techniques.

Source: Escherichia Coli

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.22 μ m filtered solution in 25 mM sodium phosphate, 400 mM NaCl
The samples of 1 μ g contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh TARC in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh TARC although stable at room temperature for 3 weeks, should be stored desiccated below -18 $^{\circ}$ C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by SDS-PAGE

Endotoxicity: The endotoxin level is less than 1 EU / μ g determined by LAL method

Amino Acid Sequence:

ARGTNVGRECCLEYFKGAIPLRKLKTWYQTSEDCSRDAIVFVTVQGRAICSDPNNK RVKNAVKYLQSLERS.

Biological Activity: Determined by its ability to chemoattract human T-lymphocytes within a concentration range of 1 - 10 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 μ g	Cat.N $^{\circ}$	11344500
<i>medium</i>	20 μ g	Cat.N $^{\circ}$	11344504
<i>large</i>	100 μ g	Cat.N $^{\circ}$	11344506
<i>x-large</i>	500 μ g	Cat.N $^{\circ}$	11344507

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