Data Sheet (Cat.No.TMPY-02061)

TargetMol

TARC/CCL17 Protein, Human, Recombinant (His)

General Information

Synonyms:	SCYA17;ABCD-2;chemokine (C-C motif) ligand 17;A-152E5.3;TARC
Protein Construction:	A DNA sequence encoding the full length of human CCL17 (Q92583-1) (Met 1-Ser 94) was expressed, fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Ala 24
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q92583-1
Molecular Weight:	9.5 kDa (predicted); 12 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 94 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, pH 7.4, 10% gly. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Chemokines are a family of small chemotactic cytokines, or proteins secreted by cells. Chemokines share the same structure similarities such as small size, and the presence of four cysteine residues in conserved locations in order to form their 3-dimensional shape. Some of the chemokines are considered pro-inflammatory which can be induced to recruit cells of the immune system to a site of infection during an immune response, while others are considered homeostatic and are implied in controlling the migration of cells during normal processes of tissue

maintenance and development. There are four members of the chemokine family: C-C kemokines, C kemokines, CXC kemokines and CX3C kemokines. The C-C kemokines have two cysteines nearby the amino terminus. There have been at least 27 distinct members of this subgroup reported for mammals, called C-C chemokine ligands-1 to 28. Chemokin ligand 17 (CCL17), also known as thymus and activation regulated chemokine(TARC), is a small cytokine belonging to the C-C chemokine family. CCL17 is expressed maily in thymus and transiently in phytohemagglutinin-stimulated peripheral blood mononuclear cells. CCL17 can induce chemotaxis in T cells by binding with the chemokine receptor CCR4.

Reference

Laing KJ,et al.(2004) Chemokines. Developmental and comparative immunology. 28 (5): 443-60.
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Hori T,et al.(2008) CCL8 is a potential molecular candidate for the diagnosis of graft-versus-host disease. Blood. 111 (8): 4403-12.
Biber K,et al.(2003) Expression of L-CCR in HEK 293 cells reveals functional responses to CCL2, CCL5, CCL7, and CCL8. Journal of Leukocyte Biology. 74 (2): 243-51.