TARC/CCL17 Protein, Mouse (70a.a)

Cat. No.:	HY-P7293
Synonyms:	rMuTARC/CCL17; C-C motif chemokine 17; SCYA17
Species:	Mouse
Source:	E. coli
Accession:	F6R5P4 (A34-P103)
Gene ID:	20295
Molecular Weight:	Approximately 7.9 kDa

PROPERTIES

AA Sequence	A R A T N V G R E C C L D Y F K G A I P I R K L V S W Y K T S V E C S R D A I V F L T V Q G K L I C A D P K D K H V K K A I R L V K N P R P
Biological Activity	Full biological activity determined by a chemotaxis bioassay using human T-lymphocytes is in a concentration range of 1.0-10 ng/ml.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	CCL17, also known as thymic and activating regulatory chemokine (TARC), is a powerful chemokine commonly associated with type 2 immune responses, and its encoding gene is located on chromosome 16 in humans. CCL17 can be produced by thymic and antigen-presenting cells such as dendritic cells, macrophages, and monocytes, and acts by binding to the cell surface chemokine receptor CCR4. CCR4 is a G protein-coupled receptor expressed as a chemokine receptor on Th2 cells, cutaneous lymphocytes skin-localized T cells and regulatory T cells, and also on T cells in adult T-cell leukemia/lymphoma and cutaneous T-cell lymphoma. CCR4 has an important role in the regulation of immune homeostasis and activation of innate immune cells in the central nervous system (CNS). CCL17 plays an important role in the recruitment of CCR4-positive

Th2 lymphocytes, is involved in the transport of Th2 cells in eosinophil-associated diseases (including AA and AD) and may be involved in the transport of tumor cells in certain T-cell lymphomas.CCL17 is also thought to be a homeostatic and inducible neuromodulatory chemokine that maintains the typical highly branching morphology of hippocampal microglia under homeostatic conditions and promotes adaptation of microglia morphology to acute LPS-induced neuroinflammation. CCL17 is also associated with autoimmune and allergic disorders[1][2].

REFERENCES

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[3]. Christian Vestergaard, et al. Thymus- and activation-regulated chemokine (TARC/CCL17) induces a Th2-dominated inflammatory reaction on intradermal injection in mice. Exp Dermatol. 2004 Apr;13(4):265-71.

[4]. Shuixiang Deng, et al. Recombinant CCL17 Enhances Hematoma Resolution and Activation of CCR4/ERK/Nrf2/CD163 Signaling Pathway After Intracerebral Hemorrhage in Mice. Neurotherapeutics. 2020 Oct;17(4):1940-1953.

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