

Recombinant Human Secondary Lymphoid Chemokine (6CKine/CCL21/Exodus-2)

Alternate names:	CCL21, Exodus2, TCA4
Catalog No.:	PA1143XC
Quantity:	1 mg
Species:	Human
Source:	E. coli
Format:	Purity: >98% is greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Anion-exchange FPLC. (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel. Endotoxin is less than 0.1 ng/μg (IEU/μg) of 6CKine. Dimers / aggregates: less than 1%

Description: SLC/CCL21, normally expressed in high endothelial venules and in T cell zones of spleen and lymph nodes, strongly attracts T cells and dendritic cells (DC). Secondary lymphoid tissue chemokine (CCL21/SLC) regulates the homing of naive T cells and dendritic cells that express CC-chemokine receptor 7 (CCR7) from distant sites to lymphoid tissue such as lymph nodes. Recombinant Human Exodus-2 is also known as SLC (Secondary Lymphoid-Tissue Chemokine), TCA-4 (T-cell activation-4), and 6CKine. Recombinant CCL21 produced in E. coli as a single, non-glycosylated, polypeptide chain containing 111 amino acids and having a molecular mass of 12219 Dalton. The sequence of the first five N-terminal amino acids was determined and was found to be, Ser-Asp-Gly-Gly-Ala. Precursor- Protein structure and amino acid sequence: Format: This antigen is supplied as sterile filtered, white lyophilized (freeze-dried) powder. 6CKine was lyophilized from a concentrated (1 mg/ml) solution in water containing no additives. It is recommended to reconstitute the lyophilized 6CKine in sterile 18 MΩ H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions. Format (continued): Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm . 2. Analysis by RP-HPLC, using a standard solution of 6CKine as a Reference Standard.

Molecular weight: 12 kDa

Storage: Lyophilized 6CKine although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution 6CKine should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles. Shelf life: one year from despatch.

General Readings: 1. Analysis of Antitumor Activity Elicited by Vaccination with Combinations of Interleukin-12 DNA with gp100 DNA or the Chemokine CCL21 In Vivo. Hum Gene Ther 2006 Aug;17(8):859-70

2. The N-terminal domain of CCL21 reconstitutes high affinity binding, G protein activation, and chemotactic activity, to the C-terminal domain of CCL19. *Biochem Biophys Res Commun* 2006 Sep 29;348(3):1089-93
3. Expression of CCR7 and its ligands CCL19/CCL21 in muscles of polymyositis. *J Neurol Sci* 2006 Aug 1.
4. Role of CCL21 and CCL19 in allergic inflammation in the ovalbumin-specific murine asthmatic model. *J Allergy Clin Immunol* 2006 May;117(5):1040-6
5. Loss of dendritic cell migration and impaired resistance to *Leishmania donovani* infection in mice deficient in CCL19 and CCL21. *J Immunol* 2006 May 1;176(9):5486-93
6. Intrapulmonary administration of CCL21 gene-modified dendritic cells reduces tumor burden in spontaneous murine bronchoalveolar cell carcinoma. *Can*