

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CCL21/6Ckine in direct ELISAs and Western blots. Does not cross-react with recombinant mouse (rm) CCL21, recombinant human (rh) MCP-1, rhMCP-2, rhMCP-3, rhMCP-4, rmMCP-5, rhMIP-1 α , rmMIP-1 α , rhMIP-1 β , rmMIP-1 β , rhMIP-1 δ , rmMIP-1 γ , rmMIP-2, rhMIP-3 α , rmMIP-3 α , rrMIP-3 α , rhMIP-3 β , rmMIP-3 β , or rmCCL7.
Source	Monoclonal Mouse IgG ₁ Clone # 54125
Purification	Protein A or G purified from ascites
Immunogen	<i>E. coli</i> -derived recombinant human CCL21/6Ckine Ser24-Pro134 Accession # O00585
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	Recombinant Human CCL21/6Ckine (Catalog # 366-6C)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

6Ckine is a novel CC chemokine discovered independently by three groups from the EST database. 6Ckine, also named SLC (Secondary Lymphoid-tissue Chemokine), CCL21 and Exodus-2, shows 21 - 33% identity to other CC chemokines. 6Ckine contains the four conserved cysteines characteristic of β chemokines plus two additional cysteines in its unusually long carboxyl-terminal domain. Human 6Ckine cDNA encodes a 134 amino acid residue, highly basic, precursor protein with a 23 amino acid residue signal peptide that is cleaved to form the predicted 111 amino acid residue mature protein. Mouse 6Ckine cDNA encodes a 133 amino acid residue protein with a 23 residue signal peptide that is cleaved to generate the 110 residue mature protein. Human and mouse 6Ckine are highly conserved, exhibiting 86% amino acid sequence identity. 6Ckine is constitutively expressed at high levels in lymphoid tissues such as lymph nodes, spleen and appendix. In mouse, high levels of 6Ckine mRNA are also detected in the lung. The gene for human 6Ckine has been localized at human chromosome 9p13 rather than chromosome 17 where the genes of many human CC chemokines are clustered. The 6Ckine gene location is within a region of about 100 kb from the gene for MIP-3 β /ELC, another novel CC chemokine.

Unlike most CC chemokines, 6Ckine is not chemotactic for monocytes. Recombinant mouse 6Ckine is chemotactic *in vitro* for thymocytes and activated T cells. Recombinant human 6Ckine has been shown to be chemotactic for some human T cell lines, resting PBL, and cultured T cells expanded with PHA and IL-2. 6Ckine has also been reported to inhibit hemopoietic progenitor colony formation in a dose-dependent manner. 6Ckine acts via a class of as yet unidentified CC receptors on both T cells and B cells that are not shared by any other CC chemokines so far tested.

References:

1. Hedrick, J.A. and A. Zlotnik (1997) J. Immunol. **159**:1589.
2. Hromas, R. *et al.* (1997) J. Immunol. **159**:2554.
3. Nagira, M. *et al.* (1997) J. Biol. Chem. **272**:19518.