

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CCL21/6Ckine in direct ELISAs and Western blots. Does not cross-react with recombinant human (rh) 6Ckine, rhMIP-1α, rhMIP-1β, recombinant mouse (rm) MIP-1α, rmMIP-1β, rhMIP-1δ, rmMIP-1γ, rmMIP-2, rhMIP-3α, rmMIP-3α, rhMIP-3β, rmMIP-3β, rhTeck, or rmTeck.
Source	Monoclonal Rat IgG _{2B} Clone # 59106
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse CCL21/6Ckine Ser24-Gly133 Accession # P84444
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	D3 mouse embryonic stem cell line fixed with paraformaldehyde and permeabilized with saponin.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

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, highly basic, precursor protein with a 23 aa signal peptide that is cleaved to form the predicted 111 amino acid residue mature protein. Mouse 6Ckine cDNA encodes a 133 amino acid protein with a 23 signal peptide that is cleaved to generate the 110 aa mature protein. Human and mouse 6Ckine are highly conserved, exhibiting 86% aa 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 MIP-3β/ELC gene, another identified 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.

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.

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