

**DESCRIPTION**

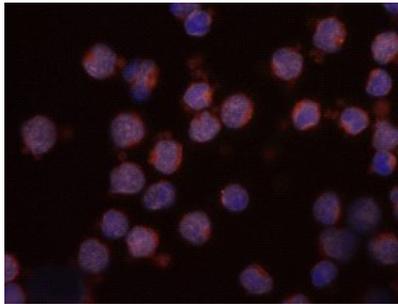
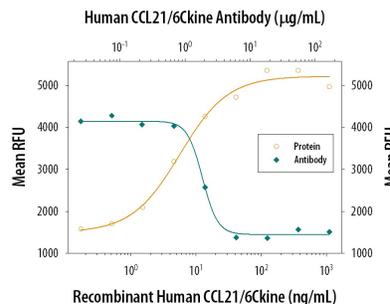
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CCL21/6Ckine in direct ELISAs and Western blots. In direct ELISAs, less than 15% cross-reactivity with recombinant mouse (rm) CCL21/6Ckine is observed and less than 5% cross-reactivity with recombinant human (rh) Fractalkine, rhTeck, rhMCP-3, rmCRG-2, rhVIC, and rmVIC is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CCL21/6Ckine Ser24-Pro134 Accession # Q6ICR7
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human CCL21/6Ckine (Catalog # 366-6C)
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Neutralization</b>	Measured by its ability to neutralize CCL21/6Ckine-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR7. The Neutralization Dose (ND <sub>50</sub> ) is typically 1-4 µg/mL in the presence of 50 ng/mL Recombinant Human CCL21/6Ckine.	

**DATA**

<p><b>Immunocytochemistry</b></p>  <p><b>CCL21/6Ckine in Human PBMCs.</b> CCL21/6Ckine was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using 10 µg/mL Goat Anti-Human CCL21/6Ckine Antigen Affinity-purified Polyclonal Antibody (Catalog # AF366) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>	<p><b>Neutralization</b></p>  <p><b>Chemotaxis Induced by CCL21/6Ckine and Neutralization by Human CCL21/6Ckine Antibody.</b> Recombinant Human CCL21/6Ckine (Catalog # 366-6C) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR7 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Human CCL21/6Ckine (50 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Human CCL21/6Ckine Antigen Affinity-purified Polyclonal Antibody (Catalog # AF366). The ND<sub>50</sub> is typically 1-4 µg/mL.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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  $\beta$  chemokines plus two additional cysteines in its unusually long carboxyl-terminal domain. Human 6Ckine cDNA encodes a 134 amino acid (aa) residue, highly basic, precursor protein with a 23 aa residue signal peptide that is cleaved to form the predicted 111 aa residue mature protein. Mouse 6Ckine cDNA encodes a 133 aa 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% 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 gene for MIP-3 $\beta$ /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.