Mouse CCL21/6Ckine Antibody

Antigen Affinity-purified Polyclonal Goat IgG

Catalog Number: AF457

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CCL21/6Ckine in direct ELISAs and Western blots. In direct ELISAs, approximately 100% cross reactivity with recombinant rat CCL21/6Ckine is observed and less than 15% cross-reactivity with recombinant human CCL21/6Ckine is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse CCL21/6Ckine Ser24-Gly133 Accession # P84444
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm 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 µm filtered solution in PBS.

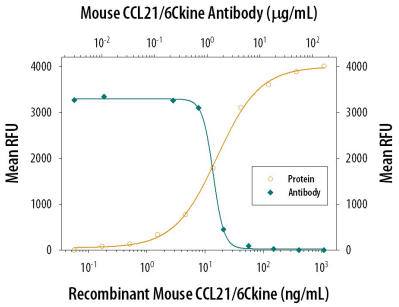
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse CCL21/6Ckine (Catalog # 457-6C)
Immunohistochemistry	5-15 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10^6 cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Neutralization	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_{50}) is typically 0.5-2.5 µg/mL in the presence of 50 ng/mL Recombinant Mouse CCL21/6Ckine.	

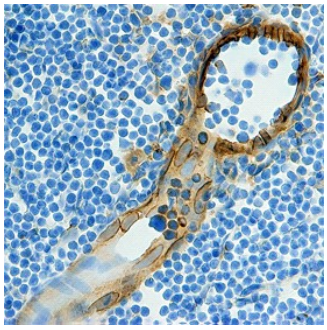
DATA

Neutralization



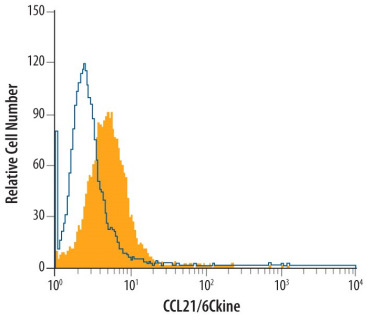
Chemotaxis Induced by CCL21/6Ckine and Neutralization by Mouse CCL21/6Ckine Antibody. Recombinant Mouse CCL21/6Ckine (Catalog # 457-6C) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR7 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Mouse CCL21/6Ckine (50 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse CCL21/6Ckine Antigen Affinity-purified Polyclonal Antibody (Catalog # AF457). The ND_{50} is typically 0.5-2.5 µg/mL.

Immunohistochemistry



CCL21/6Ckine in Mouse Thymus. CCL21/6Ckine was detected in perfusion fixed frozen sections of mouse thymus using Goat Anti-Mouse CCL21/6Ckine Antigen Affinity-purified Polyclonal Antibody (Catalog # AF457) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to endothelial cells. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.

Intracellular Staining by Flow Cytometry



Detection of CCL21/6Ckine in D3 Mouse Cell Line by Flow Cytometry. D3 mouse embryonic stem cell line was stained with Goat Anti-Mouse CCL21/6Ckine Antigen Affinity-purified Polyclonal Antibody (Catalog # AF457, filled histogram) or control antibody (Catalog # AB-108-C, open histogram), followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Mouse CCL21/6Ckine Antibody

Antigen Affinity-purified Polyclonal Goat IgG

Catalog Number: AF457

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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.** ● 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 MIP-3β/ELC gene, another identified novel CC chemokine. Unlike most CC chemokines, 6Ckine is not chemotactic for monocytes. 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. Mature rat CCL21 shares 84% aa sequence identity with mouse CCL21.

Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449