

DESCRIPTION

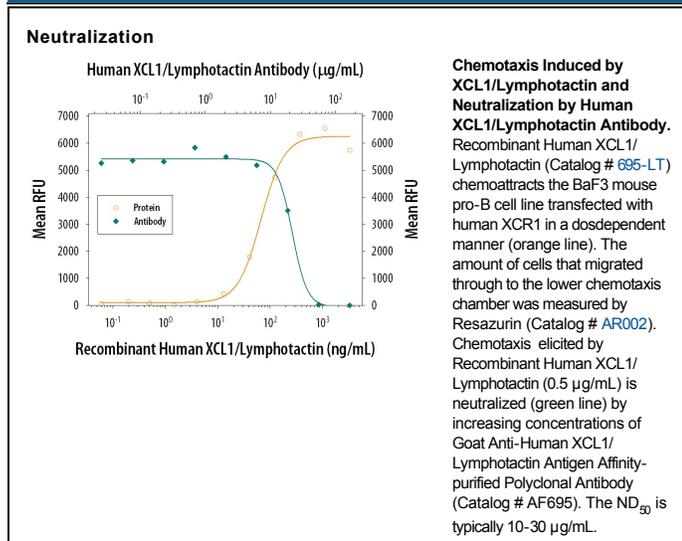
Species Reactivity	Human
Specificity	Detects human XCL1/Lymphotactin in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant mouse Lymphotactin is observed, and less than 1% cross-reactivity with recombinant human (rh) Eotaxin-3, rhHCC-1, and rhMCP-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human XCL1/Lymphotactin Val22-Gly114 Accession # P47992
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 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 Human XCL1/Lymphotactin (Catalog # 695-LT)
Neutralization		Measured by its ability to neutralize XCL1/Lymphotactin-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human XCR1. The Neutralization Dose (ND ₅₀) is typically 10-30 µg/mL in the presence of 0.5 µg/mL Recombinant Human XCL1/Lymphotactin.

DATA



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. <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

Human lymphotactin (Lptn)/XCL1 (also named human SCM-1 α and ATAC) and its mouse homologue belong to the C or γ subfamily of chemokines. The C chemokines lack two (the 1st and 3rd) of the four invariant cysteine residues normally found in the CC and CXC chemokines and have an extended carboxy terminus. Human lymphotactin encodes a 114 amino acid residue precursor protein with a 21 amino acid residue predicted signal peptide. The expression of lymphotactin is abundant in some activated T cells such as activated CD8⁺ T cells and other class I MHC restricted T cells. Lptn expression is absent in CD4⁺ T cells. Human and mouse Lptn share approximately 60% amino acid sequence homology. The gene for lymphotactin has been mapped to chromosome 1 in both human and mouse. Recombinant human lymphotactin has been shown to have chemotactic activity for lymphocytes and NK cells. The orphan receptor GPR5 has been reported to be the specific receptor for Lptn.

References:

1. Kennedy, J. *et al.* (1995) *J. Immunol.* **155**:203.
2. Zlotnik, A. *et al.* (1999) *Critical Reviews in Immunol.* **19**:1.