

DESCRIPTION

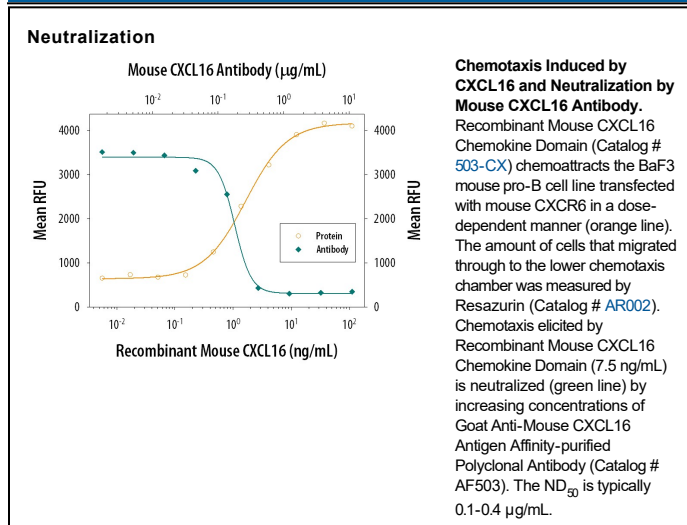
Species Reactivity	Mouse
Specificity	Detects mouse CXCL16 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) CXCL16, rhFractalkine, recombinant mouse Fractalkine, and recombinant rat Fractalkine is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CXCL16 Asn27-Pro114 Accession # Q8BSU2
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 CXCL16 Chemokine Domain (Catalog # 503-CX)
Flow Cytometry	2.5 µg/10 ⁶ cells	Raw264.7 mouse monocyte/macrophage cell line
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 CXCL16-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with mouse CXCR6. Matloubian, M. <i>et al.</i> (2000) <i>Nature Immunol.</i> 1:298. The Neutralization Dose (ND ₅₀) is typically 0.1-0.4 µg/mL in the presence of 7.5 ng/mL Recombinant Mouse CXCL16 Chemokine Domain.	

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

Mouse CXCL16 (CXC chemokine 16) is a non-ELR motif-containing CXC chemokine with a transmembrane domain. CX3CL1/Fractalkine and CXCL16 are the only two transmembrane chemokines within the superfamily. Mouse CXCL16 cDNA encodes a 246 amino acid (aa) precursor protein with a putative 26 aa residue signal peptide, an 88 aa residue chemokine domain, an 87 aa residue mucin-like spacer region, a 22 aa residue transmembrane domain, and a 23 aa residue cytoplasmic tail. Mouse and human CXCL16 share 49% overall aa identity and 70% similarity in the chemokine domains. Mouse CXCL16 is produced by dendritic cells in lymphoid organ T cell zones and by cells in the splenic red pulp both as membrane-bound and soluble forms. Based on northern blot analysis, CXCL16 is also expressed in some nonlymphoid tissues such as lung, small intestine and kidney. The receptor for CXCL16 has been identified as CXCR6/Bonzo (STRL33 and TYMSTR), a receptor previously shown to be a co-receptor for HIV entry. CXCR6 is expressed on naive CD8 cells, natural killer T cells and activated CD8 and CD4 T cells.