

DATASHEET
Version 20181206**CXCL16, Mouse****Cat. No.:** Z02853-25**Size:** 25.0 ug**Synonyms:** CXCL16, Mouse;**Description:**

Mouse CXCL16 (CXC chemokine 16) is a nonELR motifcontaining 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 mucinlike 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 membranebound 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 coreceptor for HIV entry. CXCR6 is expressed on naive CD8 cells, naturalkiller T cells and activated CD8 and CD4 T cells.

Amino Acid Sequence:

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00001 NQGSVAGSCS CDRTISSGTQ IPQGTLDHIR KYLKAFHRCF
00041 FFIRFQLQSK SVCGGSDQW VRELVDCEK KECGTGHGKS
00081 FHHQKHLF
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Source: *E. coli***Species:** Mouse**Biological Activity:** Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using murine lymphocytes is in a concentration of 20-1000 ng/ml.**Molecular Weight:** Approximately 9.9 kDa, a single non-glycosylated polypeptide chain containing 88 amino acids.**Formulation:** Lyophilized from a 0.2 µm filtered concentrated solution in PBS.**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.**Purity:** > 98 % by SDS-PAGE and HPLC analyses.**Endotoxin Level:** Less than 1 EU/µg of rMuCXCL16 as determined by LAL method.**Storage:** This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.