

Recombinant Murine CXCL16 (rmCXCL16)

Catalog Number: 221-16

Description Mouse CXCL16 (CX

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.

Synonyms SRPSOX, Zmynd15, AV290116, BB024863; CXCL16v1; CXCL16v2; 0910001K24Rik

AA Sequence NQGSVAGSCS CDRTISSGTQ IPQGTLDHIR KYLKAFHRCP FFIRFQLQSK

SVCGGSQDQW VRELVDCFER KECGTGHGKS FHHQKHLP

Source Escherichia coli

Molecular Weight Approximately 9.9 kDa protein containing 88 amino acid residues.

Purity >98% by SDS-PAGE and HPLC analyses.

Biological Activity Fully biologically active as determined by its ability to chemoattract murine lymphocytes using

a concentration of 20- 1000ng/ml.

Physical Appearance White lyophilized powder.

Formulation Lyophilized from a 0.2 µm filtered concentrated solution in PBS.

Endotoxin $< 1EU/\mu g$ of growth factor as determined by LAL method.

Reconstitution Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0

mg/mL.

Storage Storage Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For

maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage This product is for research use only. It is not approved for use in humans, animals, or *in vitro*

diagnostic procedures.