Technical Data Sheet

Recombinant Murine CXCL16 (rMu CXCL16)

Murine CXCL16

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, natural killer T cells and activated CD8 and CD4 T cells.

Catalog Number:	RC332-27
Source:	*Escherichia coli.*
Molecular Weight:	Recombinant murine CXCL16 is a 9.9 kDa protein containing 88 amino acid residues.
Quantity:	5ug/25ug/1mg
Purity:	>98% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. Determined by its ability to chemoattract murine lymphocytes using a concentration of 20-1000 ng/ml.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered concentrated solution in PBS.
AA Sequence:	NQGSVAGSCS CDRTISSGTQ IPQGTLDHIR KYLKAFHRCP FFIRFQLQSK SVCGGSQDQW VRELVDCFER KECGTGHGKS FHHQKHLP
Endotoxin:	Less than 1EU/μg of rMuCXCL16 as determined by LAL method.
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.

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**.

Usage: This material is offered by Bio Basic Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.