



User Manual

CXCL16 (CXCL16) (Murine)

Cat. No. MECXP-16013

Description:

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 residues (a.a.) precursor protein with a putative 26 a.a. residues signal peptide, an 88 a.a. residues chemokine domain, an 87 a.a. residues mucinlike spacer region, a 22 a.a. residue transmembrane domain, and a 23 a.a. residues cytoplasmic tail. Mouse and human CXCL16 share 49% overall a.a. 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.

Source:

Escherichia coli

Unit:

1 mg

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.

Formulation:

Lyophilized from a 0.2 μm filtered concentrated solution in PBS.

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.

Molecular Weight:

Approximately 9.9 kDa, a single non-glycosylated polypeptide chain containing 88 amino acids.

Endotoxin:

Less than 1 EU/ μg of CXCL16 as determined by LAL method.

Usage:

This material is offered by Cyagen Biosciences for research, laboratory or further evaluation purposes. FOR RESEARCH USE ONLY. NOT INTENDED FOR ANY ANIMAL OR HUMAN THERAP EUTIC OR DIAGNOSTIC USE.

Biological Activity:

The biologically active determined by a chemotaxis bioassay using murine lymphocytes is in a concentration of 20-1000 ng/mL.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

AA Sequence:

NQGSVAGSCS CDRTISSGTQ IPQGTLDHIR KYLKAFHRCP FFIRFQLQSK
SVCGGSQDQW VRELVDCFER KECGTGHGKS FHHQKHP

Purity:

> 98% by SDS-PAGE and HPLC analyses.

Material Safety Data Sheets (MSDSs) are available upon request.

The Certificate of Analysis (COA), which provides detailed quality control information for each product, is also available at the Cyagen website.

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