
Product Data Sheet

Product Name: CXCL16 Mouse
 Cat. No.: GP21081
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	C-X-C motif chemokine 16; Small-inducible cytokine B16; Transmembrane chemokine CXCL16; Scavenger receptor for phosphatidylserine and oxidized low density lipoprotein; SR-PSOX; Cxcl16; Srpsox; Zmynd15; AV290116; BB024863; 0910001K24Rik.		
Amino Acid Sequence	NQGVSAGSCS CDRTISSGTQ IPQGTLDHIR KYLKAFHRCP FFIRFQLQSK SVCGGSQDQW VRELVDCEFER KECGTGHGKS FHHQKHLF.		
Solubility	It is recommended to reconstitute the lyophilized CXCL16 Mouse in sterile 18MΩ-cm H ₂ O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	The protein was lyophilized from a concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 50mM NaCl.		

Introduction

Mouse CXCL16 is a nonELR motif including CXC chemokine with a transmembrane domain. Mouse CXCL16 cDNA encodes a 246 a.a. precursor protein with a putative 26 a.a. residue signal peptide, an 88 a.a. residue chemokine domain, an 87 a.a. residue mucinlike spacer region, a 22 a.a. residue transmembrane domain, and a 23 a.a. residue cytoplasmic tail. CXCL16 induces a strong chemotactic response and calcium mobilization. Furthermore, CXCL16 acts as a scavenger receptor on macrophages, which specifically binds to OxLDL (oxidized low density lipoprotein), suggesting that it may be involved in pathophysiology such as atherogenesis. Mouse CXCL16 is generated by dendritic cells in lymphoid organ T cell zones as well as by cells in the splenic red pulp both as membranebound and soluble forms. CXCR6/Bonzo (STRL33 and TYMSTR) is the receptor for CXCL16. CXCL16 is expressed in the spleen, lymph nodes, and Peyer patches. It is also expressed in non-lymphoid tissues such as lung, kidney, small

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intestine, and thymus, with weak expression in heart and liver and no expression in brain and purified B- and T-cells. CXCL16 deficiency is linked to breast cancer progression. In addition, CXCL16 is involved in immunological liver injury by regulating T lymphocyte infiltration in liver tissue. Furthermore, CXCL16 has a distinctive role in the maintenance of cardiac allograft tolerance mediated by natural killer T cells. Moreover, CXCL16 has a significant role in not only the production of IFN-gamma by NKT cells, but also promotion of Th1-inclined immune responses mediated by NKT cells.

Biological Activity

Determined by its ability to chemoattract murine lymphocytes using a concentration range of 100-1000ng/ml corresponding to a Specific Activity of 1,000-10,000IU/mg.

Stability

Lyophilized CXCL16 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution CXCL16 should be stored at 4°C between 2-7 days and for future use below -18°C .For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Background

CXCL16 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 88 amino acids and having a molecular mass of 9.9kDa. The CXCL16 is purified by proprietary chromatographic techniques.

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