

Recombinant Murine CXCL16

Information

Gene ID	66102
Accession #	Q8BSU2
Alternate Names	SR-PXOX, Scavenger Peceptor for Phosphatidylserine and Oxidized Low Density Lipoprotein, Small-inducible Cytokine B16, Transmembrane Chemokine CXCL16
Source	Escherichia coli.
M.Wt	Approximately 9.9 kDa, a single non-glycosylated polypeptide chain containing 88 amino acids.
AA Sequence	NQGSVAGSCS CDRTISSGTQ IPQGTLDHIR KYLKAFHRCP FFIRFQLQSK SVCGGSQDQW VRELVDCEFER KECGTGHGKS FHHQKHLP
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS.
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.
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.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5µg	100µg	500µg
Recombinant Murine CXCL16	5µg	100µg	500µg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

Purity	> 98 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rMuCXCL16 as determined by LAL method.

Description

CXCL16 is a member of the CXC chemokine family. Larger than other chemokines, it is one of the only two transmembrane chemokines in the family and the other is CX3CL1. Mouse CXCL16 has 246 a.a. and consists of a 26 a.a. residue putative signal peptide, an 88 a.a. residue chemokine domain, an 87 a.a. residue mucin-like spacer region, a 22 a.a. residue transmembrane domain, and a 23 a.a. residue cytoplasmic tail. Mouse CXCL16 shares 70 % sequence identity with human CXCL16 in chemokine domain. CXCL16 interacts with the chemokine receptor CXCR6, also known as Bonzo. Expression of CXCL16 is induced by the inflammatory cytokines IFN-gamma and TNF-alpha. Functions of CXCL16 include inducing a strong chemotactic response and calcium mobilization. CXCL16 also 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.

Reference

1. Wuttge DM, Zhou X, Sheikine Y, et al. 2004. Arterioscler Thromb Vasc Biol, 24: 750-5
2. Hojo S, Koizumi K, Tsuneyama K, et al. 2007. Cancer Res, 67: 4725-31
3. Lu Y, Wang J, Xu Y, et al. 2008. Mol Cancer Res, 6: 546-54
4. Wente MN, Gaida MM, Mayer C, et al. 2008. Int J Oncol, 33: 297-308
5. Manabe S, Iwase A, Goto M, et al. 2011. Arch Gynecol Obstet, 284: 1567-72.

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