

Recombinant Murine CXCL16

#R00421

Size: 5 µg/100 µg/500 µg

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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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.

AA Sequence

NQGSVAGSCSCDRTISSGTQIPQGTLDIRKYLKAFH
RCPFFIRFQLQSKSVCGGSQDQWVRELVDCEFERKEC
GTGHGKSFFHHQKHLP

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.

Product Specification

Synonyms	SR-PXOX, Scavenger Peceptor for Phosphatidylserine and Oxidized Low Density Lipoprotein, Small-inducible Cytokine B16, Transmembrane Chemokine CXCL16
Accession	Q8BSU2
GeneID	66102
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 9.9 kDa, a single non-glycosylated polypeptide chain containing 88 amino acids.
Purity	> 98 % by SDS-PAGE and HPLC analyses.
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.

Physical Appearance Sterile Filtered White lyophilized (freeze-dried) powder.

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

Endotoxin Less than 1 EU/µg of rMuCXCL16 as determined by LAL method.