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CXCL16

Catalog # PVGS1127

Product Information

Primary Accession	Q8BSU2
Species	Mouse
Sequence	Asn27-Pro114
Purity	> 98% as analyzed by SDS-PAGE > 98% as analyzed by HPLC
Endotoxin Level	
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 20.0-1000.0 ng/ml.
Expression System	E. coli
Theoretical Molecular Weight	9.9 kDa
Formulation	Lyophilized from a 0.2 □m filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	66102
Other Names	C-X-C motif chemokine 16, Scavenger receptor for phosphatidylserine and oxidized low density lipoprotein, SR-PSOX, Small-inducible cytokine B16, Transmembrane chemokine CXCL16, Cxcl16, Srpsox
Target Background	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, naturalkiller T cells and activated CD8 and CD4 T cells.

Protein Information

Name	Cxcl16
Synonyms	Srpsox
Function	Induces a strong chemotactic response. Induces calcium mobilization. Binds to CXCR6/Bonzo. 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.
Cellular Location	Membrane; Single-pass type I membrane protein
Tissue Location	Widely expressed. Not detected in purified B- and T-cells.