

SDF-1β/CXCL12 Catalog # PVGS1109

Product Information

Primary Accession Q9QZD1
Species Rat

Sequence Lys22-Lys89, expressed with additional C-terminal sequence (RLKM)

Purity > 97% as analyzed by SDS-PAGE

> 97% as analyzed by HPLC

Endotoxin Level

Biological Activity Fully biologically active when compared to standard. The biological activity

determined by a chemotaxis bioassay using human peripheral blood

monocytes is in a concentration range of 100.0-200.0 ng/ml.

Expression System E. coli

Theoretical Molecular Weight 8.4 kDa

Formulation Lyophilized from a 0.2 Im filtered solution in 20 mM PB, pH 7.4, 150 mM

NaCl.

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

Target Background Stromal-Cell Derived Factor-1 beta (SDF-1β), also known as SCYB12, PBSF and

CXCL12, is an 8.3 kDa, heparin-binding member of the CXC (or alpha) family of chemokines and signal through the CXCR4 receptor. SDF-1 α and β are reported to be monomers at neutral pH and physiologic ionic strength, On the cell surface, this may well facilitate SDF-1 interaction with its two receptors, CXCR4 and syndecan4. Heparin sulfate is known to protect SDF-1 from proteolysis, and CXCR4 exists constitutively as a dimer. Among its many functions, CXCL12 is known to influence lymphopoiesis, regulate patterning and cell number of neural progenitors, and promote angiogenesis (12, 13). It

also enhances the survival of myeloid progenitor cells

Protein Information

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.