

Technical Data Sheet

Flogen[®] Recombinant Rat SDF-1 beta/CXCL12

(rRtSDF-1 β /CXCL12)

Catalog Number:	PGR0241-012B
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 8.4 kDa, a single non-glycosylated polypeptide chain containing 72 amino acids.
Quantity:	2 μ g/10 μ g/1mg
AA Sequence:	KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKSNNRQVC IDPKLKWIQE YLDKALNKRL KM
Purity:	>97% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ determined by a chemotaxis bioassay using human peripheral blood monocytes is less than 200 ng/ml, corresponding to a specific activity of $> 5.0 \times 10^3$ IU/mg.
Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in 20mM PB, pH 7.4, 150mM NaCl.
Endotoxin:	Less than 1EU/ μ g of rRtSDF-1 β /CXCL12 as determined by LAL method.
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 $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8 $^\circ\text{C}$, but should be kept at -20 $^\circ\text{C}$ for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 $^\circ\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 $^\circ\text{C}$ to -70 $^\circ\text{C}$. Avoid repeated freeze/thaw cycles.
Usage:	For research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Rat SDF-1 beta/CXCL12

SDF-1 α and β are stromal derived CXC chemokines, and signal through the CXCR4 receptor. SDF-1 α and β chemoattract B and T cells, and have been shown to induce migration of CD34+ stem cells. Additionally, the SDF-1 proteins exert HIV suppressive activity in cells expressing the CXCR4 receptor.