

**TECHNICAL DATA SHEET**

# Recombinant Mouse CXCL12 (SDF-1 $\alpha$ ) (Carrier-free)

Catalog Number: 21-8141

**RPx-Pro™ Recombinant Protein**

**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Mouse CXCL12 (SDF-1 $\alpha$ ) (Carrier-free)

**DESCRIPTION**

Stromal cell derived factor 1 alpha, SDF-1 alpha, also known as C-X-C motif chemokine 12, CXCL12, is a member of the intercrine family. SDF-1 alpha is a potent chemotactic agent for peripheral blood T cells and lamina propria T cells. SDF-1 alpha has also been shown to induce migration of CD34+ stem cells.

**MOLECULAR MASS**

Recombinant Mouse CXCL12 (SDF-1 $\alpha$ ) is a 7.9 kDa protein composed of 68 amino acid residues.

**AMINO ACID SEQUENCE**

KPVLSYRCP CRFFESHIAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLKWIQE YLEKALNK

**SOURCE**

E. Coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/ $\mu$ g of protein (<1 EU/ $\mu$ g).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

Human, Rat

**BIOACTIVITY**

Determined by its ability to chemoattract human peripheral blood monocytes using a concentration of 50-100 ng/ml.

**RESEARCH AREAS**

AIDS/HIV; Chemotaxis; Immune System; Inflammation; Neurobiology; Stem Cells & Differentiation; Wound Healing

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

De La Luz Sierra M, Yang F, Narazaki M, Salvucci O, Davis D, Yarchoan R, Zhang HH, Fales H and Tosato G 2004 Blood 103(7): 2452–9. Bleul CC, Fuhlbrigge RC, Casasnovas JM, Aiuti A and Springer TA 1996 J Exp Med 184(3): 1101–9. Askari AT, Unzek S, Popovic ZB, Goldman CK, Forudi F, Kiedrowski M, Rovner A, Ellis SG, Thomas JD, DiCorleto PE, Topol EJ and Penn MS 2003 Lancet 362(9385): 697–703. Ma Q, Jones D, Borghesani PR, Segal RA, Nagasawa T, Kishimoto T, Bronson RT and Springer TA 1998 Proc Natl Acad Sci USA 95(16): 9448–53.

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