



Human CXCL12 peptide (DAG293)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Recombinant Human CXCL12 is a non-glycosylated polypeptide chain containing 68 amino acids and having a molecular weight of 8,004 Da, was expressed in E.coli. The sequence of the first five N-terminal amino acids was determined to be Lys-Pro-Val-Ser-Leu.
Antigen Description	SDF-1 (stromal cell-derived factor-1) is a small cytokine belonging to the chemokine family that is officially designated Chemokine (C-X-C motif) ligand 12 (CXCL12). Stromal cell-derived factors 1-alpha and 1-beta are small cytokines that belong to the intercrine family, members of which activate leukocytes and are often induced by proinflammatory stimuli such as lipopolysaccharide, TNF, or IL1. The intercrines are characterized by the presence of 4 conserved cysteines that form 2 disulfide bonds. They can be classified into 2 subfamilies. In the CC subfamily, which includes beta chemokine, the cysteine residues are adjacent to each other. In the CXC subfamily, which includes alpha chemokine, they are separated by an intervening amino acid. The SDF1 proteins belong to the latter group.
Species	Human
Conjugate	Unconjugated
Applications	The specific activity is determined by its ability to chemotact human peripheral T cells activated with PHA and IL-2 using a concentration of 20-80 ng/ml. Each laboratory should determine an optimum working titer for use in its particular application. Other
Format	Purified, Lyophilized. Reconstitute using sterile deionized water to a concentration $\geq 100 \mu\text{g/ml}$. Further dilutions can be made in other aqueous buffers.
Concentration	1 mg/ml (OD _{280nm} , E _{0.1%} = 1.06) (prior to lyophilization)
Buffer	Lyophilized from water containing no additives
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	This gene encodes a stromal cell-derived alpha chemokine member of the intercrine family. The encoded protein functions as the ligand for the G-protein coupled receptor, chemokine (C-X-C motif) receptor 4, and plays a role in many diverse cellular functions, including embryogenesis, immune surveillance, inflammation response, tissue homeostasis, and tumor growth and metastasis. Mutations in this gene are associated with resistance to human immunodeficiency virus type 1 infections. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013]
Keywords	CXCL12; chemokine (C-X-C motif) ligand 12; IRH; PBSF; SDF1; TLSF; TPAR1; SCYB12; stromal cell-derived factor 1; intercrine reduced in hepatomas; pre-B cell growth-stimulating factor

GENE INFORMATION

Entrez Gene ID	6387
UniProt ID	P48061