

TECHNICAL DATA SHEET

## Human SDF-1 alpha

### Human Stromal-Cell Derived Factor-1, recombinant

Synonyms: CXCL12, PBSF

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date*
10 µg	W 1895950010	3510099200	November 2014

### Description

Recombinant human SDF-1 alpha is an 8.0 kDa protein containing 68 amino acid residues. SDF-1 alpha and beta are stromal derived CXC chemokines, and signal through the CXCR4 receptor. SDF-1 alpha and beta 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.

- **Biological activity**      *See below*
- **Source**                      *E. coli*
- **Purity**                         $\geq 98\%$  (SDS-PAGE, HPLC)
- **Endotoxin level**            $\leq 0.1\text{ng}/\mu\text{g}$  ( $\leq 1\text{EU}/\mu\text{g}$ )
- **Stabilizer**                    None
- **Buffer**                        None
- **Physical state**              Sterile filtered, lyophilized

### Biological activity

The biological activity was determined by its ability to chemoattract human peripheral T cells activated with PHA and IL-2 using a concentration range of 20.0-80.0 ng/ml.

### Reconstitution

We recommend a quick spin followed by reconstitution in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex*. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

### Stability

The lyophilized protein is stable at room temperature for up 1 month. Working aliquots stored with a carrier protein are stable for at least 3 months at -20°C to -80°C. **Please avoid repeated freeze thaw cycles.**

### Usage

FOR RESEARCH USE ONLY

NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

\*For lyophilized product if stored as indicated. Please contact our technical support if the product has expired.

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