

## SDF-2 Protein, Human, Recombinant (His)

### General Information

Synonyms:	stromal cell-derived factor 2
Protein Construction:	A DNA sequence encoding the pro form of human SDF2 (NP_008854.2) (Met 1-Leu 211) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Ser 19
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q6IBU4
Molecular Weight:	22.7 kDa (predicted); 22.7 kDa (reducing condition, due to glycosylation)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing 50 mM Tris, 100 mM NaCl, pH 8.0, 0.5 mM PMSF, 0.5 mM EDTA, 0.5 mM TCEP, 10% glycerol. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

**Reconstitution:**  
A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

**Stability & Storage:**

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

**Shipping:**

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

Stromal derived factors (SDFs) are a loosely defined group of molecules that are generated by stromal cells. Two of the stromal derived factors, SDF-1 and SDF-4 belong to the chemokine family. Other SDFs, such as SDF-2 and SDF-5 are not well defined and their biological functions are less known. SDF-2 is first isolated from the mouse stromal cell line ST2 as a secretory protein. The amino acid sequence deduced from the murine clone and the

## A DRUG SCREENING EXPERT

---

human homolog are conserved more than 92 %, and the aa sequence of SDF-2 shows similarity to those of yeast dolichyl phosphate-D-mannose, protein mannosyltransferases. SDF-1 and its receptor are strongly indicated in the progression of various cancers including breast cancer. SDF-2, SDF2-L1, SDF-4, and SDF-5 are ubiquitously expressed in various cancer cell lines and SDF-2, SDF-4 and SDF-5 are expressed in mammary tissues. These SDFs have prognostic value and warrant further investigation in their biological functions and clinical value.

### Reference

Hamada,T.etal.,1996,Gene.176(1-2):211-214.

Anjard,C.etal.,1998,Development.125(20):4067-4075.

Kang,H.etal.,2009,Int J Oncol.35(1):205-211.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481