## **HMGBiotech**

Services and products related to HMGB1 a signal for tissue damage and regeneration

# **Stromal Cell-Derived Factor 1α** (SDF-1α, CXCL12)

#### **Product Description:**

Recombinant Stromal Cell-Derived Factor  $1\alpha(SDF-1\alpha)$  is a 8 kDa chemokine protein expressed in many tissues and cell types.

The protein is almost identical (92% homology) in human, mouse and rat.

This product corresponds to human sequence and is produced in *E.coli*: the first methionine is present but does not affect the biological activity.

SDF1 forms a complex with fully reduced HMGB1 and has chemoattractant activity. The protein is free from LPS (<0.1EU/mL).

The product contains <0.006% v/v of Triton X-114 due to LPS removal procedure.

#### **Reagent format:**

SDF1 $\alpha$  protein we provide is the natural protein, with no tags or additional amino acids.

The lyophilized protein once reconstituted will be dissolved in a solution containing DPBS without Ca and Mg.

**Storage:** 2-8°C. The protein once resuspended can be stored frozen (-20°C).

### This product is for research use only

#### **References:**

- Mantonico M. et al (2024) The acidic intrinsically disordered region of the inflammatory mediator HMGB1 mediates fuzzy interactions with CXCL12. Nat Commun 15(1):1201
- De Leo F. et al (2019) Diflunisal targets the HMGB1/CXCL12 heterocomplex and blocks immune cell recruitment.EMBO Rep 4: 20(10-)
- Ye Y. *et al* (2019) The Role of High Mobility Group Box 1 in Ischemic Stroke.Front Cell Neurosci 2:13:127
- Venereau E. et al (2013) HMGB1 and leukocyte migration during trauma and sterile inflammation. Mol Immunol.55(1):76-82

MKPVSLSYRCPCRFFESHVARANVKHLKILNTP NCALQIVARLKNNNRQVCIDPKLKWIQEYLEKA LNK

Fig. 1. HMGB1 sequence

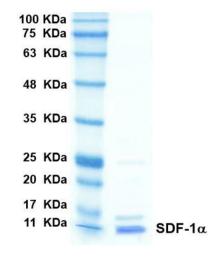


Fig. 2. SDS-PAGE with Coomassie Blue staining

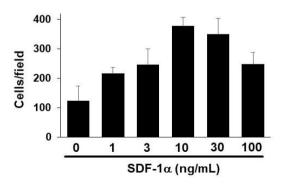


Fig. 3. Migration assay with 3T3 mouse cells