

# SCGF- $\beta$ , human recombinant

<b>CATALOG #:</b>	7198-10	10 $\mu$ g
	7198-50	50 $\mu$ g
<b>ALTERNATE NAMES:</b>	Stem Cell Growth Factor-beta	
<b>SOURCE:</b>	E coli	
<b>PURITY:</b>	$\geq$ 98% by SDS-PAGE gel and HPLC analyses	
<b>MOL. WEIGHT:</b>	25.0 kDa	
<b>ENDOTOXIN LEVEL:</b>	< 0.1 ng/ $\mu$ g of protein (<1EU/ $\mu$ g).	
<b>FORM:</b>	Lyophilized	
<b>FORMULATION:</b>	Sterile filtered through a 0.2 micron filter. Lyophilized from 0.25x PBS and 1mM DTT.	
<b>STORAGE CONDITIONS:</b>	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute 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.

**DESCRIPTION:**

SCGF alpha and beta are hematopoietic growth factor that exerts their activity at early stages of hematopoiesis. The SCGFs are non-glycosylated species-specific cytokines that can support growth of primitive hematopoietic cells, and in combination with EPO or GM-CSF, promote proliferation of erthroid or myeloid progenitors, respectively. Recombinant human SCGF- $\beta$  is a 25.0 kDa polypeptide containing 227 amino acid residues.

**AMINO ACID SEQUENCE:**

MGHGARGAER EWEGGWGGAQ EEEERREALM LKHLQEALGL PAGRGDENPA  
GTVEGKEDWE MEEDQGEESSE EEATPTPSSG PSPSPPTEDI VTYILGRLAG  
LDAGLHQLHV RLHALDTRVV ELTQGLRQLR NAAGDTRDAV QALQEAQGRA  
EREHGRLEGC LKGLRLGHKC FLLSRDFEAQ PSASPHPLSP DQPNGGTLEN  
CVAQASDDGS WWDHDCQRRRL YVCEFPF

**BIOLOGICAL ACTIVITY:**

Determined by the dose dependent stimulation of the proliferation of human TF-1 cells, previously grown in media containing GM-CSF. The expected ED<sub>50</sub> for this effect is  $\leq$ 7.0 ng/ml.

**RELATED PRODUCTS:**

- SCGF- $\alpha$ , human recombinant (Cat # 7197-10, -50)
- Human Cell<sup>exp</sup> Human Recombinant SCF (Cat # 6478-10, -50)
- SCF, human recombinant (Cat # 4327-10, -50, -1000)
- SCF, murine recombinant (Cat # 4328-10, -50, -1000)
- SCF, rat recombinant (Cat # 4329-10, -50, -1000)
- SCF Antibody (Cat # 5327-100)
- SCF Antibody (Cat # 5328-100)
- SCF Antibody (Cat # 5329R-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**