

Recombinant Human Stem Cell Factor

Catalog Number: SJA06

Strength: 10µg, 100µg

Specifications and Use

Source	<ul style="list-style-type: none">● Yeast
Molecular Mass	<ul style="list-style-type: none">● Approximately 16.0kD~26.0kD glycosylated protein.
Purity	<ul style="list-style-type: none">● ≥95%
Endotoxin Level	<ul style="list-style-type: none">● <1EU/µg, determined by the LAL method.
Biological Activity	<ul style="list-style-type: none">● Measured in a MTT assay using UT-7 cell line. The specific Activity shall be not less than 1.2 x10⁶ U/mg.
Formulation	<ul style="list-style-type: none">● Lyophilized from a 0.2µm filtered solution in PBS, pH7.0±0.5.
Reconstitution	<ul style="list-style-type: none">● It is recommended to reconstitute the lyophilized rHuSCF in 0.2ml sterile water.
Storage	<ul style="list-style-type: none">● Lyophilized samples are stable for 36 months from date of manufacture at -20°C to -70°C.● Upon reconstitution, this cytokine can be stored at -20°C to -70°C in a manual defrost freezer for three months without detectable loss of activity.● Avoid repeated freeze-thaw cycles.

Stem cell factor (SCF) is a potent hematopoietic growth factor required in regulating both embryonic and adult hematopoiesis. SCF protein promotes the survival, differentiation, and mobilization of multiple cell types including myeloid, erythroid, megakaryocytic, lymphoid, germ cell, and melanocyte progenitors. SCF is a primary growth and activation factor for mast cells and eosinophils. And SCF assists in the recovery of cardiac function following myocardial infarction by increasing the number of cardiomyocytes and vascular channels. Stem cell factor is an important cytokine for ex vivo clinical applications. Along with other cytokines, SCF is used in the culture and expansion of hematopoietic stem cells (HSCs) as well as for proliferation and differentiation of both myeloid and erythroid progenitor cells.

FOR LABORATORY USE ONLY.