

Recombinant Human Stem Cell Factor (SCF)

Catalog Numbers PHC2115 (10 µg), PHC2116 (25 µg), PHC2111 (100 µg), PHC2113 (1 mg)

Pub. No. MAN0003410 Rev. A.0

Product specifications

Lot number	See product label.
Molecular weight	18.5 kDa
Purity	>95% as determined by SDS PAGE analysis.
Amino acid sequence	EGICRNRVTN NVKDVTKLVA NLPKDYMIL KYVPGMDVLP SHCWISEMVV QLSDSLTDLL DKFSNISEGL SNYSIIDKLV NIVDDLVECV KENSSKDLKK SFKSPEPRLF TPEEFFRIFN RSIDAFKDFV VASETSDCVV SSTLSPEKDS RVSVTKPFML PPVA
Biological activity	ED ₅₀ <10.0 ng/mL, determined by dose dependent proliferation of human MO-7e cells. Determine the optimal concentration for each specific application using an initial dose response assay.
Formulation	Lyophilized, carrier free.
Sterility	Filtered before lyophilization through a 0.22 micron sterile filter.
Endotoxin	<0.1 ng/µg
Production	Recombinant human SCF is produced in <i>E. coli</i> and purified via sequential chromatography.
Reconstitution recommendation	Centrifuge the vial briefly, before opening to bring the contents to the bottom. Reconstitute the lyophilized protein in sterile deionized water to 0.1–1.0 mg/mL to regain full activity. Apportion the reconstituted protein into working aliquots and store at ≤–20°C. Make any further dilutions of the reconstituted protein in low endotoxin medium or buffered solution with FBS or tissue culture grade BSA.
Suggested working dilutions	The optimal concentration should be determined for each specific application.
Storage	Store the lyophilized protein at 2–8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at ≤–20°C (not in a frost-free freezer). Avoid repeated freeze-thaw cycles.
Expiration date	Expires one year from date of receipt when stored as instructed.
References	Martin, F., et al. (1990) Primary structure and functional expression of rat and human stem cell factor DNAs. <i>Cell</i> 63(1):203–211. Nocka, K., et al. (1990) Candidate ligand for the c-kit transmembrane kinase receptor: KL, a fibroblast derived growth factor stimulates mast cells and erythroid progenitors. <i>EMBO J.</i> 9(10):3287–3294. deVries, P., et al. (1991) The effect of recombinant mast cell growth factor on purified murine hematopoietic stem cells. <i>J. Exp. Med.</i> 173(5):1205–1211. Anzai, N., et al. (2002) c-kit associated with the transmembrane 4 superfamily proteins constitutes a functionally distinct subunit in human hematopoietic progenitors. <i>Blood</i> 99(12):4413–4421.

Limited product warranty

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Explanation of Symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

NOTE TO WRITER: ADD CONKEYREF SOURCE TO PUBLICATION

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