

Recombinant Human Stem Cell Factor (KITLG)

Cat No:HR2R1968

For research use only

Overview

Quantity	25 ?g
Gene Symbol	KITLG
Gene ID	4254
Accession	P21583
Alternative Name	SCF, Kit ligand, c-Kit Ligand, Mast cell growth factor, MGF
Species	Human
Source	CHO cells
Description	<p>SCF is a stromal cell-derived cytokine synthesized by fibroblasts and other cell types. SCF promotes proliferation and early differentiation of cells at the level of multipotent stem cells. It has been suggested that SCF is essential for optimal production of various hematopoietic lineages, mainly because of its ability to prevent apoptosis when co-stimulated with other cytokines. The receptor for SCF, designated SCFR (CD117) is the oncogene designated as KIT. The biological activities of SCF are considerably synergised by colony stimulating factors; GM-CSF and G-CSF, and by IL7, EPO and some other growth and differentiation factors. In combination with IL7, SCF stimulates the proliferation of pre-B cells. SCF is also a potent chemoattractant for cells expressing the kit receptor.</p> <p>Recombinant Human SCF is a glycosylated, monomeric protein (contains intra-chain disulfide bonds) that runs at approximately 25 kDa in a reducing SDS-PAGE.</p>
Functions	The ED(50) as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells was found to be ? 2.0 ng/mL
Formulation	Lyophilized from a 0.2 ?m filtered solution in PBS pH 7.0
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	18
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method
Shipping Condition	Ambient Temperature

Storage
Condition

The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

