Recombinant Mouse Stem Cell Factor (KITLG)

Cat No:HR2R2221

For research use only

Overview

Quantity	1.0 ?g
Gene Symbol	KITLG
Gene ID	17311
Accession	P20826
Alternative Name	SCF, Kit ligand, c-Kit ligand, Hematopoietic growth factor KL, Mast cell growth factor, MGF, Steel factor
Species	Mouse
Source	E. coli
Description	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 multipotential stem cells. It has been suggested that SCF is essential for optimal production of various hematopoietic lineages. The receptor for SCF, designated SCFR(CD117), is the oncogene designated as KIT. The biological activities of SCF are synergised considerably by colony stimulating factors GM-CSF and G-CSF, and also by IL-7, Epo and some other growth and differentiation factors. In combination with IL-7, SCF stimulates the proliferation of pre-B cells. SCF is also a potent chemoattractant for cells, for example, mast cells, expressing the kit receptor.
Functions	The ED50 as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is < 2.0 ng/mL
Formulation	Lyophilized from a 0.2 ?m filtered solution in 20mM Tris and 5% trehalose (pH 7.5)
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	18.9
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.