

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

C-kit ligand, the recently identified ligand for the kit tyrosine kinase receptor, is mapped to the mouse S1 locus. This pleiotropic cytokine, alternately known as stem cell factor (SCF), mast cell growth factor (MGF) and steel-factor (SLF), plays essential roles in gametogenesis, melanogenesis and early stages of hematopoiesis. In vitro and in vivo, KITLG can stimulate the proliferation of mature, as well as the proliferation and maturation of immature, mast cells. KITLG acts in a synergistic manner on purified primitive human and mouse hematopoietic precursors, with various growth factors (such as IL1, IL3, IL6, IL7, and Epo), to induce myeloid, erythroid and lymphoid lineage colony formation. The finding that KITLG is also expressed in the nervous system suggests a possible role for KITLG in the development of the nervous system.

Catalog Number	1320-01
Product Name	KITLG (SCF), Murine Recombinant Murine KIT Ligand Kitl, KL-1 Stem Cell Factor, SCF Mast Cell Growth Factor, MGF
Source	<i>Escherichia coli</i>
MW	~18.4kDa (165 amino acid)
Sequence	MKEICGNPVT DNVKDITKLV ANLPNDYMIT LNYVAGMDVL PSHCWLRDMV IQLSLSLTTL LDKFSNISEG LSNYSIIDKL GKIVDDLVL MEENAPKNIK ESPKRPETRS FTPEEFSIF NRSIDAFKDF MVASDTSDCV LSSTLGPEKD SRVSVTKPFM LPPVA
Accession Number	P20826
Purity	>97 % by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by cell proliferation assay using TF-1 cells is less than 10 ng/ml, corresponding to a specific activity of >1.0 × 10 ⁵ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.