

## Active Recombinant Mouse Kitl Protein

Cat. No. Kitl-7281M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Mouse Kitl Protein without tag was expressed in E. coli.
<b>Species</b>	Mouse
<b>Source</b>	E.coli
<b>ProteinLength</b>	26-189
<b>Description</b>	<p>Ligand for the receptor-type protein-tyrosine kinase KIT. Plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. KITLG/SCF binding can activate several signaling pathways. Promotes phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and subsequent activation of the kinase AKT1. KITLG/SCF and KIT also transmit signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. KITLG/SCF and KIT promote activation of STAT family members STAT1, STAT3 and STAT5. KITLG/SCF and KIT promote activation of PLCG1, leading to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KITLG/SCF acts synergistically with other cytokines, probably interleukins.</p>
<b>Form</b>	Liquid
<b>Bio-activity</b>	Murine LIF is fully biologically active when compared to standards. The ED50 as determined by the M1 cell differentiation assay is = 0.05 ng/mL, corresponding to a

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specific activity of =  $2 \times 10^7$  units/mg.

**Molecular Mass**

18 kDa

**AA Sequence**

MKEICGNPVTDNVKDITKLVANLPNDYMITLNYVAGMDVLP SHCWLRDMVIQLSLSL  
TTLLDKFSNISEGLSNYSIIDKLGKIVDDLVL CMEENAPKNIKESPKRPETRSFTPEEFF  
SIFNRSIDAFKDFMVASDTSDCVLSSTLGPEKDSRVS VTKPFMLPPVA

**Endotoxin**

< 1.0 EU/μg of protein (determined by LAL method)

**Purity**

> 95 % by SDS-PAGE

**Stability**

Shelf life: one year from despatch.

**Storage**

Store undiluted at 2-8 centigrade for one week or (in aliquots) at -20 to -80 centigrade for longer. Avoid repeated freezing and thawing.

**Concentration**

1.0 mg/mL (determined by bradford assay)

**Storage Buffer**

Phosphate buffer saline (pH 7.4) containing 10 % glycerol.

## GENE INFORMATION

**Gene Name**

*Kitl* kit ligand [ *Mus musculus* (house mouse) ]

**Official Symbol**

*Kitl*

**Synonyms**

*Kitl*; kit ligand; S; Gb; SC; SF; SI; bl; Clo; Con; Kit; Mgf; SCF; SLF; Ste; blz; *Kitlg*; contrasted; kit ligand; C-kit ligand; Steel factor; cloud gray; grizzle-belly; hematopoietic growth factor KL; mast cell growth factor; stem cell factor; EC 3.2.1.31

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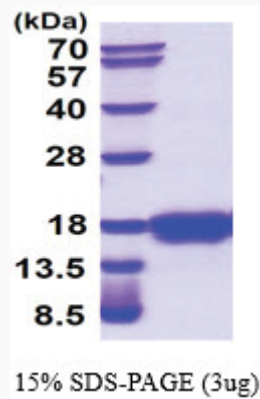
**Gene ID** 17311

**mRNA Refseq** NM\_001347156

**Protein Refseq** NP\_001334085

**UniProt ID** P20826

**SDS-PAGE**



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