Active Recombinant Mouse Kitl Protein

Cat. No. Kitl-3697M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of Mouse kit ligand (Kitl) without tag was expressed in E. coli.
Species	Mouse
Source	E.coli
Description	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.
Bio-activity	The ED50 as determined by the dose-dependent stimulation of the proliferation of the human TF-1 cells is > 10 ng/mL, corresponding to a specific activity of > 1 × 10^5 units/mg.

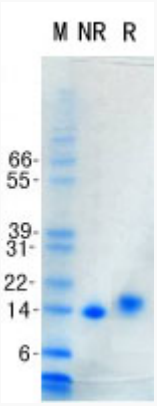
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Molecular Mass	18.3 kDa
AA Sequence	MKEICGNPVTDNVKDITKLVANLPNDYMITLNYVAGMDVLPSHCWLRDMVIQLSLSL TTLLDKFSNISEGLSNYSIIDKLGKIVDDLVLCMEENAPKNIKESPKRPETRSFTPEEFF SIFNRSIDAFKDFMVASDTSDCVLSSTLGPEKDSRVSVTKPFMLPPVA
Endotoxin	< 0.1 ng/μg of protein (< 1 EU/μg)
Purity	> 95% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
Storage	Store at -80 centigrade.
Storage Buffer	LyopH ilized from a 0.2 μM filtered solution of 20 mM pH ospH ate buffer, 100 mM NaCl, pH 7.2

GENE INFORMATION

Gene Name	Kitl kit ligand [Mus musculus (house mouse)]
Official Symbol	Kitl
Synonyms	KITL; kit ligand; cloud gray; C-kit ligand; Steel factor; grizzle-belly; stem cell factor; mast cell growth factor; hematopoietic growth factor KL; Gb; SF; Sl; Clo; Con; Mgf; SCF; SLF; Kitlg; contrasted
Gene ID	17311
mRNA Refseq	NM_013598

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Protein Refseq	NP_038626
UniProt ID	P20826
SDS-PAGE	

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