

Recombinant Mouse SCF/c-Kit Ligand Protein

Catalog No. PKSM041151

Note: Centrifuge before opening to ensure complete recovery of vial contents.

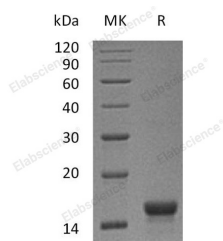
Description

Synonyms	FPH2;KIT ligand;Kitl;KITLG;KL-1;Mast cell growth factor;MGF;MGFSHEP7;SCF;Stem cell factor;SFc-Kit ligand;SLF;steel factor;Hematopoietic growth factor KL
Species	Mouse
Expression Host	E.coli
Sequence	Lys26-Ala189
Accession	P20826
Calculated Molecular Weight	18.4 kDa
Observed molecular weight	16 kDa
Tag	None
Bioactivity	Measured by the dose-dependent stimulation of TF-1 cells. The ED50 for this effect is 4-12 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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Background

Mouse stem cell factor (SCF), is the ligand for the receptor-type protein-tyrosine kinase KIT. It 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. It also promotes phosphorylation of PIK3R1, which is 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.

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