

Human CellExp™ KITLG /SCF, mouse recombinant

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| CATALOG #: | 7483-10 | 10 µg |
| ALTERNATE NAMES: | KITLG, FPH2, KL-1, Kitl, MGF, SCF, SF, SHEP7, KL. | |
| SOURCE: | HEK 293 cells (Lys 26 – Ala 189) | |
| PURITY: | ≥ 98% by SDS-PAGE gel | |
| MOL. WEIGHT: | This protein is fused with 6xHis tag at the C-terminus, has a calculated MW of 19.1 kDa. The predicted N-terminus is Lys 26. DTT-reduced Protein migrates as 19-30 kDa due to different glycosylation. | |
| ENDOTOXIN LEVEL: | <1 EU/µg by LAL method | |
| FORM: | Lyophilized | |

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

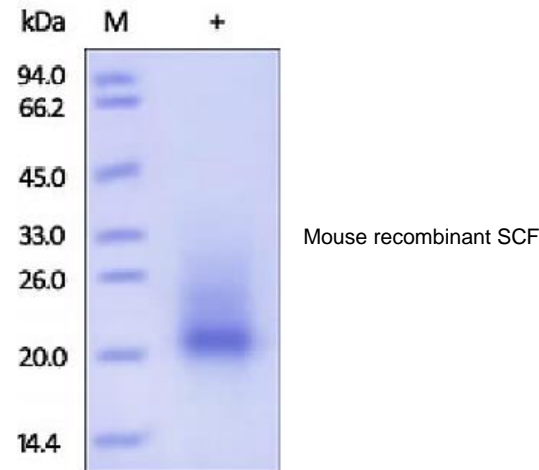
STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: Kit ligand (KITLG) also known as stem cell factor (SCF), mast cell growth factor (MGF), steel factor (SF), which belongs to the SCF family, and is a widely expressed 28 - 40 kDa type I transmembrane glycoprotein. KITLG is the ligand for the receptor-type protein-tyrosine kinase KIT. SCF / MGF 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. KITLG / SF 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 CD82 and activation of RAS, RAF1, and the MAP kinases MAPK1/ERK1 and/

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 - triphosphate. KITLG / SCF acts synergistically with other cytokines, probably interleukins.

BIOLOGICAL ACTIVITY: Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED₅₀ for this effect is typically 0.5 - 8 ng/ml.



RELATED PRODUCTS:

- Human CellExp™ SCF, human recombinant (Cat. No. 6478-10, -50)
- SCF, human recombinant (Cat # 4327-10, -50, -1000)
- SCF, murine recombinant (Cat # 4328-10, -50, -1000)
- SCF, rat recombinant (Cat # 4329-10, -50, -1000)
- SCF Antibody (Cat # 5327-100)
- SCF Antibody (Cat # 5328-100)
- SCF Antibody (Cat # 5329R-100)

FOR RESEARCH USE ONLY! Not to be used in humans.