



[Go to Product page](#)

Datasheet for ABIN2181732

KIT Ligand Protein (KITLG) (AA 26-189) (His tag)

2 Images

Overview

Quantity:	50 µg
Target:	KIT Ligand (KITLG)
Protein Characteristics:	AA 26-189
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This KIT Ligand protein is labelled with His tag.

Product Details

Sequence:	AA 26-189
Characteristics:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 19.1 kDa. The protein migrates as 19-30 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation.
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	KIT Ligand (KITLG)
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Target Details

Alternative Name: [SCF \(KITLG Products\)](#)

Background: Kit ligand (KITLG) is 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 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.

Molecular Weight: 19.5 kDa

NCBI Accession: [NP_038626](#)

Pathways: [RTK Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#)

Application Details

Restrictions: For Research Use only

Handling

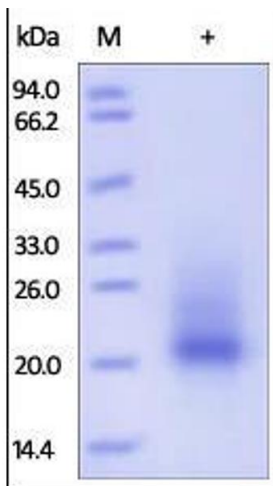
Format: Lyophilized

Buffer: PBS, pH 7.4

Handling Advice: Please avoid repeated freeze-thaw cycles.

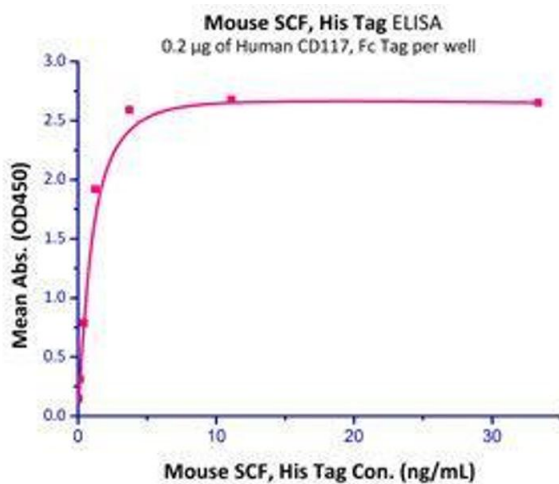
Storage: -20 °C

Storage Comment: No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C-8 °C), After reconstitution under sterile conditions for 1 month (4 °C-8 °C) or 3 months (-20 °C to -70 °C).



SDS-PAGE

Image 1. Mouse SCF, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 98%.



Binding Studies

Image 2. Immobilized Human CD117, Fc Tag (Cat# CD7-H5255) at 2 µg/mL (100 µl/well) can bind Mouse SCF, His Tag (Cat# SCF-M5228) with a linear range of 0.05-1.2 ng/mL.