

Mouse SCF Protein; His Tag

Product Information

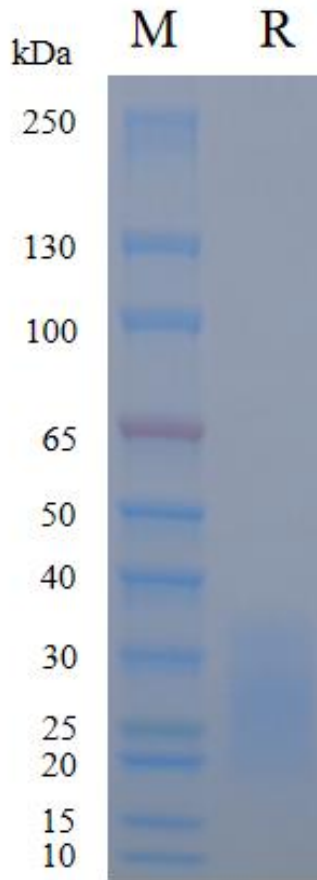
Product Name	Mouse SCF Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88463RP-100 / 100 μg GM-88463RP-1000 / 1 mg

Protein Information

Alternative Names	KITLG,FPH2,KL-1,Kitl,MGF, SF,SHEP7,KL
Source	Mouse SCF Protein; His Tag (GM-88463RP) is expressed from human 293 cells (HEK-293). It contains AA Lys 26 - Ala 189(Accession # NP_038626). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	19.1 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	SCF protein, full name Stem Cell Factor, also known as Kit ligand (KITL) or steel factor (SLF), is a cytokine that belongs to the hematopoietic growth factor family. It is encoded by the KITLG gene and is a protein associated with the human immune system and hematopoiesis. SCF protein was initially discovered in fibroblasts and later detected in various cell types, including bone marrow stromal cells, endothelial cells, and keratinocytes. SCF protein regulates the survival, proliferation, and differentiation of hematopoietic stem cells, melanocytes, and germ cells by binding to its receptor c-Kit (CD117) on the surface of target cells. Hematopoietic stem cells, mast cells, and melanocytes are important cell types with critical functions in blood cell production, immune responses, pigmentation, and gametogenesis, making them central members of the hematopoietic and immune systems. Research indicates that SCF protein plays a significant role in promoting stem cell survival, enhancing hematopoietic reconstitution, and modulating allergic inflammatory responses. Additionally, the expression of SCF protein is associated with hematological disorders, mast cell-related diseases (such as mastocytosis), pigmentation disorders, and cancer (including gastrointestinal stromal tumors), making it a potential target for immunotherapy and regenerative medicine.

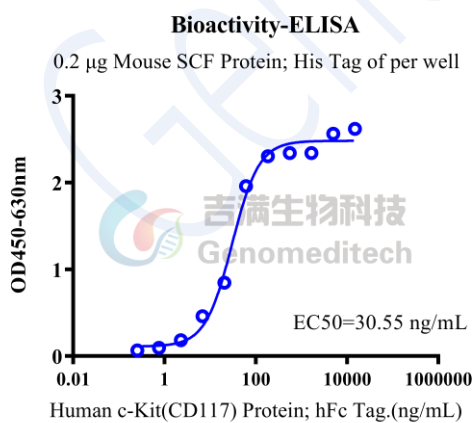
Version:4.0

SDS-PAGE



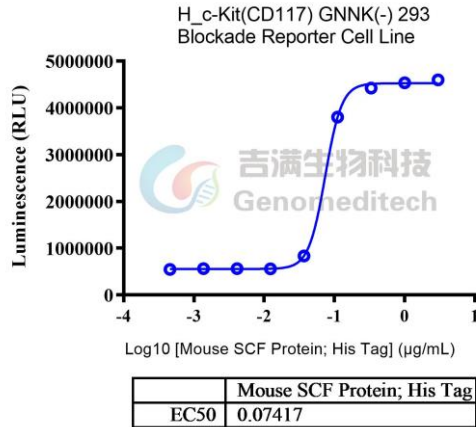
On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Mouse SCF Protein; His Tag (Catalog # GM-88463RP) was immobilized at 2 $\mu\text{g}/\text{ml}$ (100 $\mu\text{L}/\text{well}$). Increasing concentrations of Human c-Kit(CD117) Protein; hFc Tag (Catalog # GM-87119RP) were added.

Bioactivity-CELL BASE



Mouse SCF Protein; His Tag (Catalog # GM-88245463RP) was added into H_c-Kit(CD117) GNNK(-) 293 Blockade Reporter Cell Line (Catalog # GM-C37519) and stimulates related signals.