

# Human SCF Protein; mFc Tag

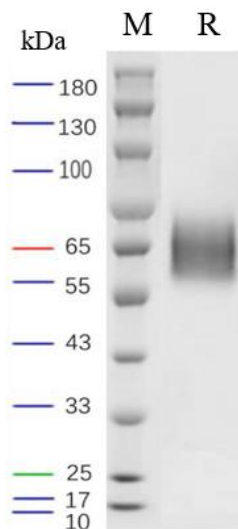
## Product Information

<b>Product Name</b>	Human SCF Protein; mFc Tag
<b>Storage temp.</b>	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.
<b>Catalog# / Size</b>	<b>GM-87653RP-100 / 100 <math>\mu\text{g}</math></b> <b>GM-87653RP-1000 / 1 mg</b>

## Protein Information

<b>Alternative Names</b>	KITLG,FPH2,KL-1,Kitl,MGF,SCF,SF,SHEP7,KL
<b>Source</b>	Human SCF Protein; mFc Tag (GM-87653RP) is expressed from human 293 cells (HEK-293). It contains AA Glu 26 - Ala 190 (Accession # P21583-1). This protein carries a mFc tag at the C-terminus.
<b>Purity</b>	> 95% as determined by SDS-PAGE
<b>Endotoxin</b>	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
<b>Predicted Mol Mass</b>	43.9 KDa
<b>Formulation</b>	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.4.
<b>Description</b>	SCF protein (Stem Cell Factor), also known as Kit Ligand-1 (KL-1), is a multifunctional cytokine protein that plays an important role in biological processes such as cell proliferation, differentiation, and survival. The SCF protein primarily exerts its effects by binding to its receptor c-Kit. c-Kit is a tyrosine kinase receptor that is widely expressed in various cell types. The binding of SCF to c-Kit activates multiple signaling pathways, including PI3K/Akt, MAPK, STAT, etc., thereby regulating cell growth, proliferation, and differentiation. SCF protein plays a crucial role in the hematopoietic system, particularly in the proliferation and differentiation of stem cells. In diseases, SCF protein also plays a significant role. Aberrant activation of the SCF/c-Kit signaling pathway may lead to the development of certain diseases, such as tumors. Therefore, SCF protein and its receptor c-Kit could potentially serve as therapeutic targets for certain diseases.

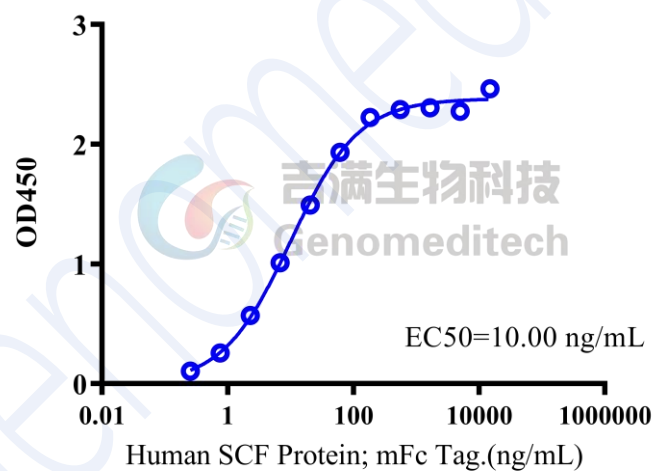
## SDS-PAGE



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

### Human SCF Protein; mFc Tag, ELISA 0.2 $\mu$ g Human c-Kit(CD117) Protein; His Tag of per well



Human c-Kit(CD117) Protein; His Tag (Catalog # GM-87117RP) was immobilized at 2  $\mu$ g/ml (100  $\mu$ L/well). Increasing concentrations of Human SCF Protein; mFc Tag (Catalog # GM-87653RP) were added.