

Human SCF Protein; His Tag

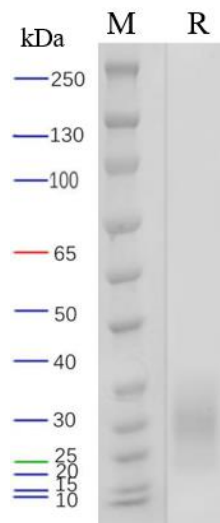
Product Information

Product Name	Human 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-87651RP-100 / 100 μg GM-87651RP-1000 / 1 mg

Protein Information

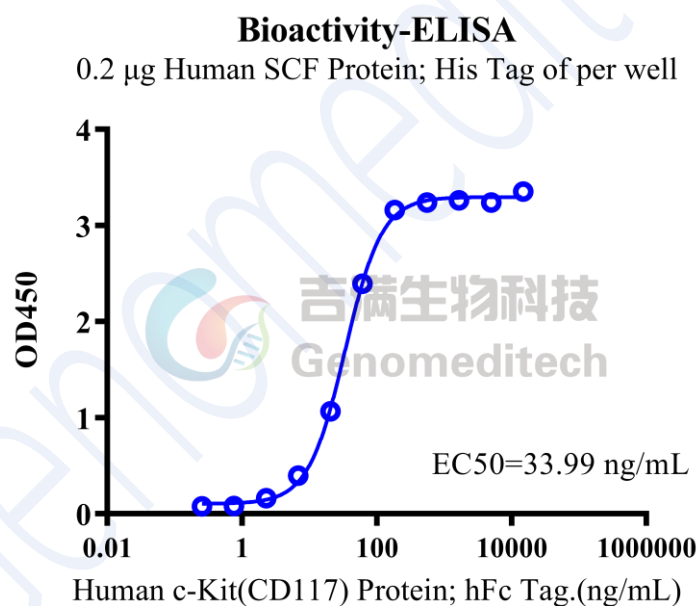
Alternative Names	KITLG,FPH2,KL-1,Kitl,MGF,SCF,SF,SHEP7,KL
Source	Human SCF Protein; His Tag (GM-87651RP) is expressed from human 293 cells (HEK-293). It contains AA Glu 26 - Ala 190 (Accession # P21583-1). This protein carries a His tag at the C-terminus.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	18.9 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.4.
Description	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 90%.

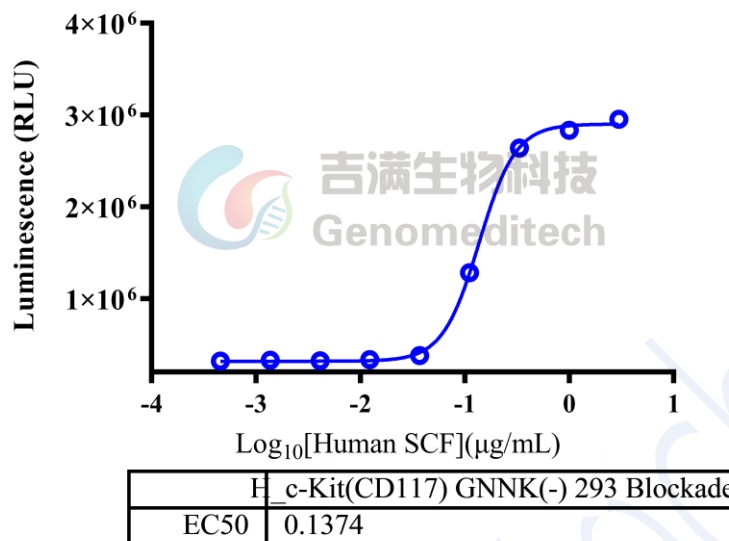
Bioactivity-ELISA



Human SCF Protein; His Tag (Catalog # GM-87651RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Human c-Kit(CD117) Protein; hFc Tag (Catalog # GM-87119RP) were added.

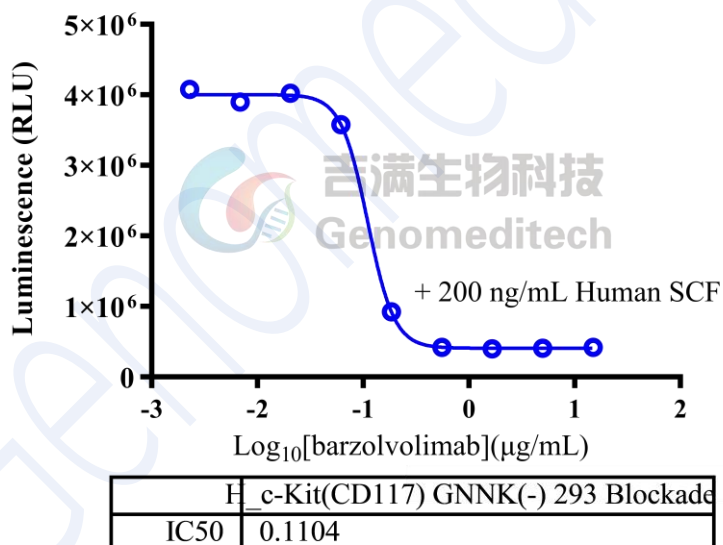
Bioactivity-CELL BASE

H_c-Kit(CD117) GNNK(-) 293 Blockade Reporter Cell Line



Human SCF Protein; His Tag (Catalog # GM-87651RP) was added into H_c-Kit(CD117) GNNK(-) 293 Blockade Reporter Cell Line (Catalog # GM-C37519) and stimulates SCF/c-Kit signals.

H_c-Kit(CD117) GNNK(-) 293 Blockade Reporter Cell Line



Neutralization assay shows that the stimulate effect of 200 ng/mL Human SCF Protein; His Tag (Catalog # GM-87651RP) was inhibited by increasing concentration of Anti-c-Kit(CD117) hIgG1 Antibody(barzolvolimab) (Catalog # GM-86542AB).