

Human c-Kit(CD117) Protein; His Tag

Product Information

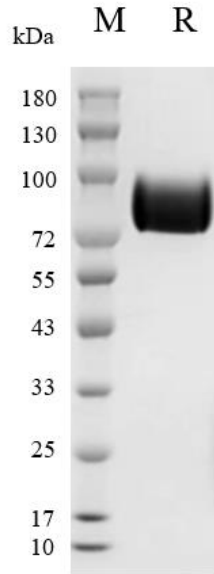
Product Name	Human c-Kit(CD117) Protein; His Tag
Storage temp.	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-87117RP-100 / 100 μg GM-87117RP-1000 / 1 mg

Protein Information

Alternative Names	CD117,SCFR,c-kit,KIT
Source	Human c-Kit(CD117) Protein; His Tag (GM-87117RP) is expressed from human 293 cells (HEK-293). It contains AA Gln 26 - Thr 516 (Accession # P10721-2). 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	54.7 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.4.
Description	<p>The c-kit protein, also known as CD117, is a transmembrane receptor tyrosine kinase and an important cell surface receptor protein. It is encoded by the c-kit gene and is a type of stem cell factor receptor. The c-kit protein is widely expressed in various cell types, including hematopoietic stem cells, neurons, macrophages, and germ cells.</p> <p>The c-kit protein plays an important role in cellular biological processes, primarily by binding with its ligand stem cell factor (SCF) to regulate cell proliferation, differentiation, migration, and survival. When SCF binds to the c-kit protein, it activates the tyrosine kinase activity of the c-kit protein, thereby activating multiple signaling pathways such as MAPK, PI3K/AKT, and JAK/STAT, influencing cell functions.</p> <p>In tumors, the c-kit protein also plays a significant role. Many tumor cells express the c-kit protein, particularly in gastrointestinal stromal tumors (GIST) and chronic myeloid leukemia (CML). Therefore, the c-kit protein has become an important marker for tumor diagnosis and treatment. Targeted therapy drugs against the c-kit protein, such as Imatinib, have been widely used to treat c-kit-positive tumors.</p>

Version:3.3 Revision Date:25/12/2023

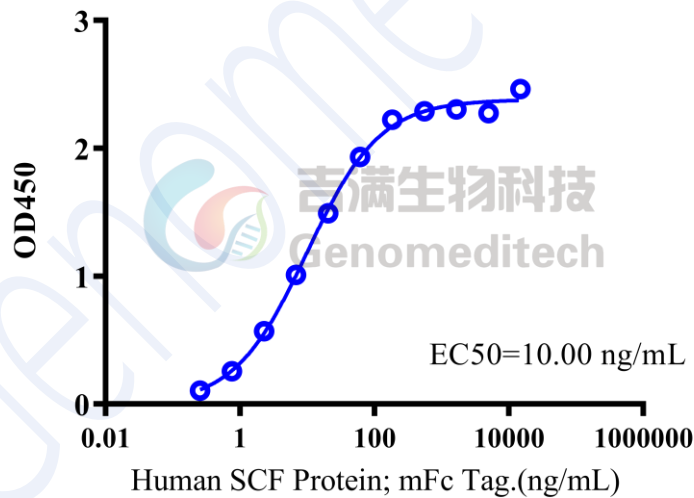
SDS-PAGE



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

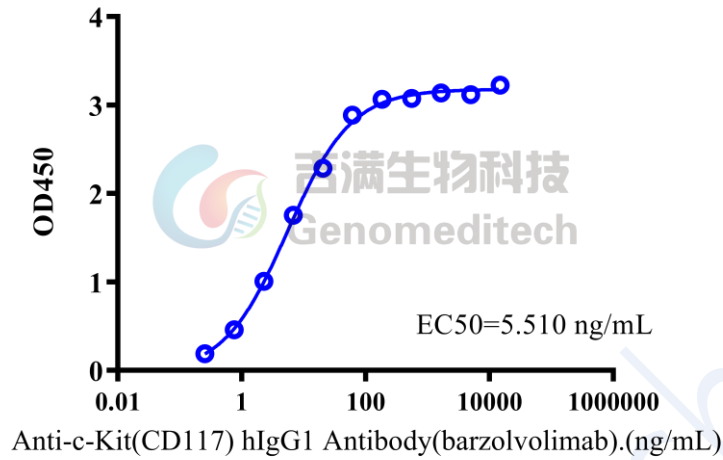
Human c-Kit(CD117) Protein; His Tag, ELISA 0.2 μ g Human c-Kit(CD117) Protein; His Tag of per well



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

Bioactivity-ELISA

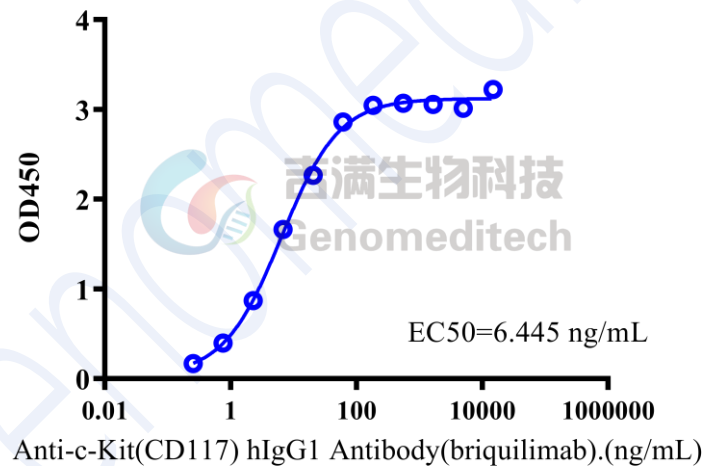
0.2 μ g Human c-Kit(CD117) Protein; His Tag of per well



Human c-Kit(CD117) Protein; His Tag (Catalog # GM-87117RP) was immobilized at 2 μ g/ml (100 μ L/well). Increasing concentrations of Anti-c-Kit(CD117) hIgG1 Antibody(barzolvolimab) (Catalog # GM-86542AB) were added.

Bioactivity-ELISA

0.2 μ 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 μ g/ml (100 μ L/well). Increasing concentrations of Anti-c-Kit(CD117) hIgG1 Antibody(briquilimab) (Catalog # GM-86543AB) were added.