Biotinylated Cynomolgus CD117 / c-kit Protein, His,Avitag (MALS verified)

Catalog # CD7-C82E4

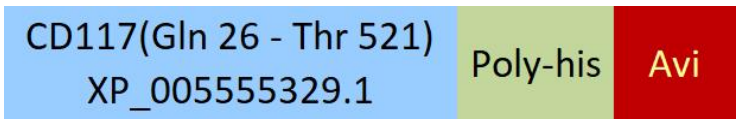
Synonym

CD117,SCFR,c-Kit,KIT

Source

Biotinylated Cynomolgus CD117 Protein, His,Avitag(CD7-C82E4) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Thr 521 (Accession # XP_005555329.1).
Predicted N-terminus: Gln 26

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 59.3 kDa. The protein migrates as 75-100 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

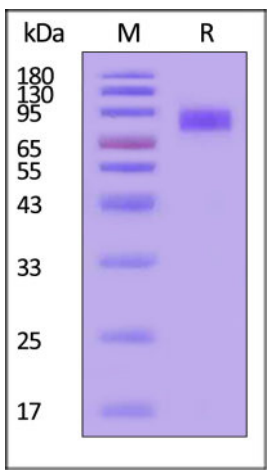
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

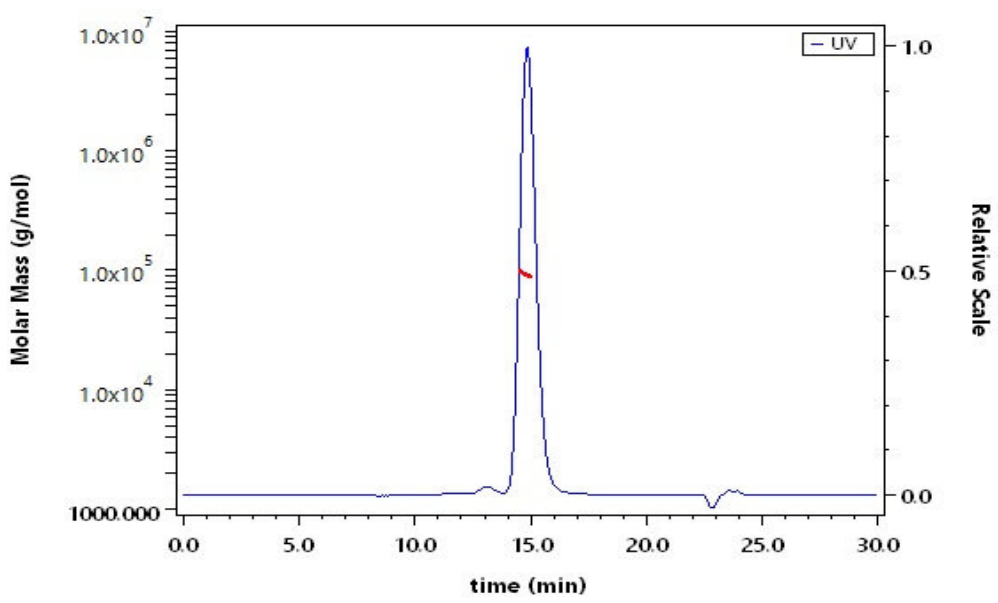
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



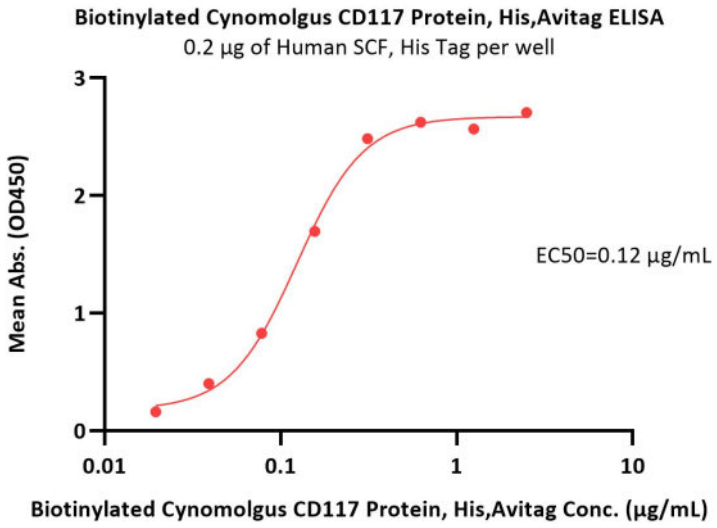
Biotinylated Cynomolgus CD117 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

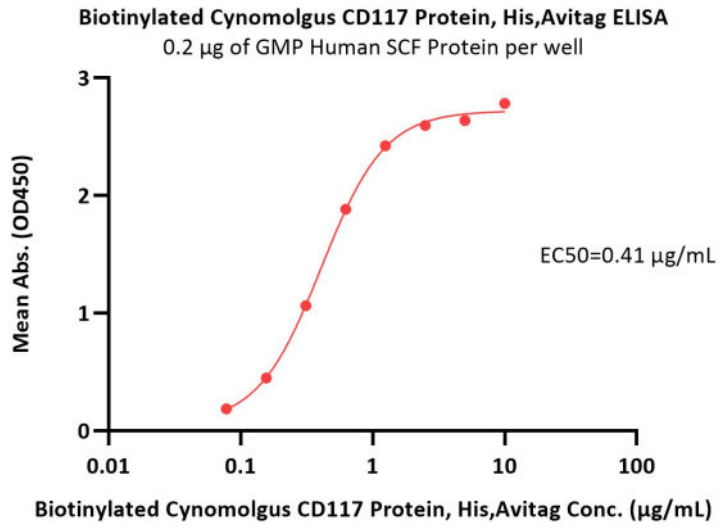


The purity of Biotinylated Cynomolgus CD117 Protein, His,Avitag (Cat. No. CD7-C82E4) is more than 90% and the molecular weight of this protein is around 75-105 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human SCF, His Tag (Cat. No. SCF-H52H3) at 2 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus CD117 Protein, His,Avitag (Cat. No. CD7-C82E4) with a linear range of 0.02-0.313 μg/mL (QC tested).



Immobilized GMP Human SCF Protein (Cat. No. GMP-SCFH25) at 2 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus CD117 Protein, His,Avitag (Cat. No. CD7-C82E4) with a linear range of 0.078-1.25 μg/mL (Routinely tested).

Background

This gene encodes a receptor tyrosine kinase. This gene was initially identified as a homolog of the feline sarcoma viral oncogene v-kit and is often referred to as proto-oncogene c-Kit. The canonical form of this glycosylated transmembrane protein has an N-terminal extracellular region with five immunoglobulin-like domains, a transmembrane region, and an intracellular tyrosine kinase domain at the C-terminus. Upon activation by its cytokine ligand, stem cell factor (SCF), this protein phosphorylates multiple intracellular proteins that play a role in in the proliferation, differentiation, migration and apoptosis of many cell types and thereby plays an important role in hematopoiesis, stem cell maintenance, gametogenesis, melanogenesis, and in mast cell development, migration and function. This protein can be a membrane-bound or soluble protein. Mutations in this gene are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous leukemia, and piebaldism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2020]