

Synonym

CD117,SCFR,c-Kit,KIT

Source

Mouse CD117, Fc Tag(CD7-M5259) is expressed from human 293 cells (HEK293). It contains AA Ser 25 - Thr 519 (Accession # [P05532-2](#)).

Predicted N-terminus: Ser 25

Molecular Characterization

CD117(Ser 25 - Thr 519) P05532-2	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 81.5 kDa. The protein migrates as 100-115 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 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

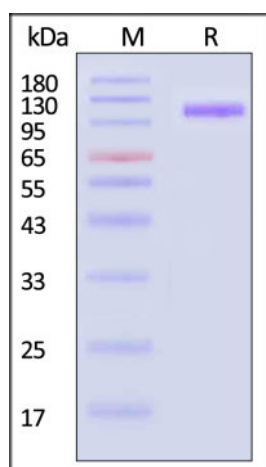
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

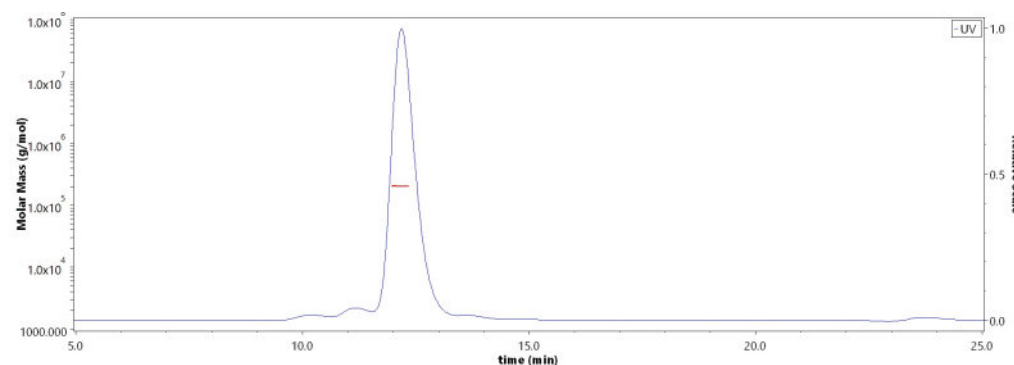
SDS-PAGE



Mouse CD117, Fc Tag 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](#)).

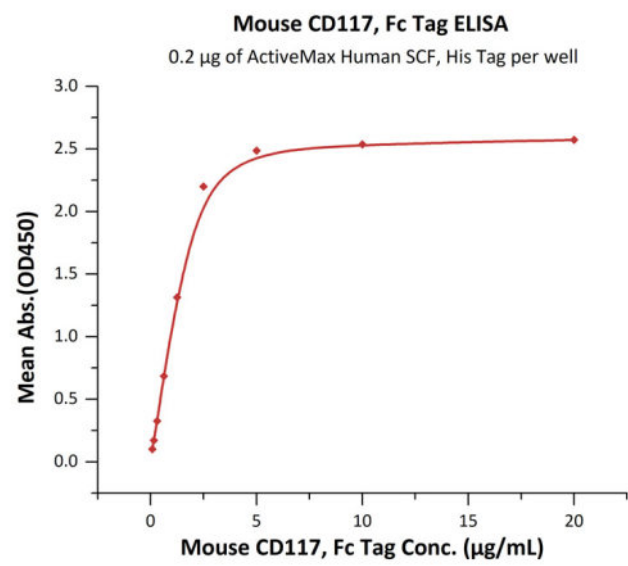
Bioactivity-ELISA

SEC-MALS



The purity of Mouse CD117, Fc Tag (Cat. No. CD7-M5259) is more than 90% and the molecular weight of this protein is around 182-222 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human SCF protein, His Tag at 2 µg/mL (100 µL/well) can bind Mouse CD117, Fc Tag (Cat. No. CD7-M5259) with a linear range of 0.078-5 µg/mL (QC tested).

Background

Mast/stem cell growth factor receptor Kit (c-Kit), a member of the protein kinase superfamily, Tyr protein kinase family and CSF-1/PDGF receptor subfamily, is also known as piebald trait protein (PBT), p145 c-kit, tyrosine-protein kinase Kit and CD117, which contains five Ig-like C2-type (immunoglobulin-like) domains and one protein kinase domain. CD117 acts as cell-surface receptor for the cytokine KITLG/SCF and plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. In response to KITLG/SCF binding, CD117 can activate several signaling pathways. Furthermore, Activated KIT promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.