

Mouse CD117 / c-kit Protein, His Tag, low endotoxin (MALS & SPR verified)

Catalog # CD7-M52H5



Synonyms

CD117, SCFR, c-Kit, KIT

Source

Mouse CD117 Protein, His Tag (CD7-M52H5) 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

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 57 kDa. The protein migrates as 65-90 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>95% 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

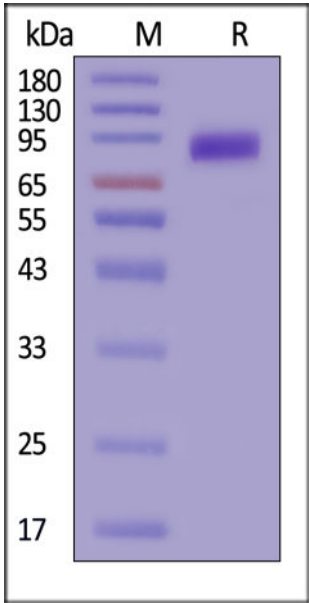
This product is stable after storage at:

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

ACRO Quality Management System

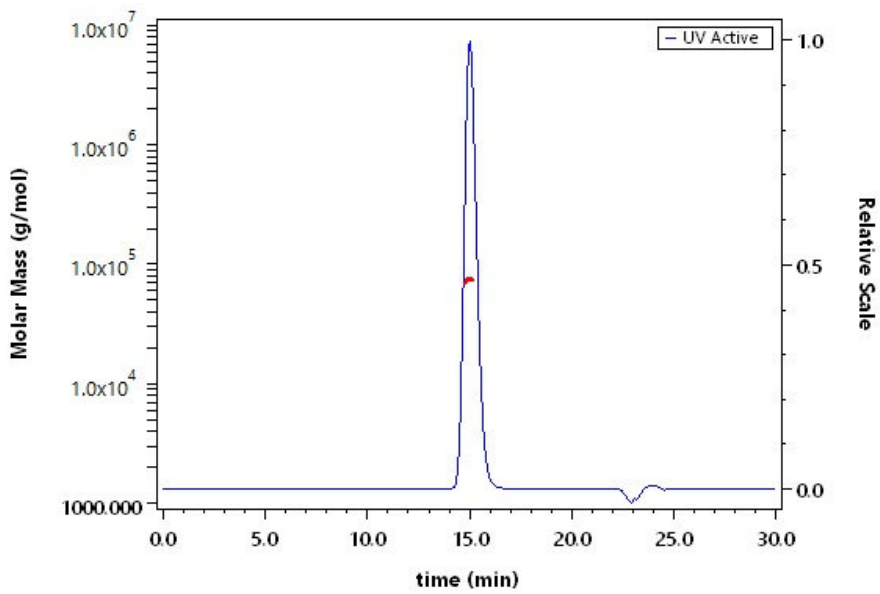
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



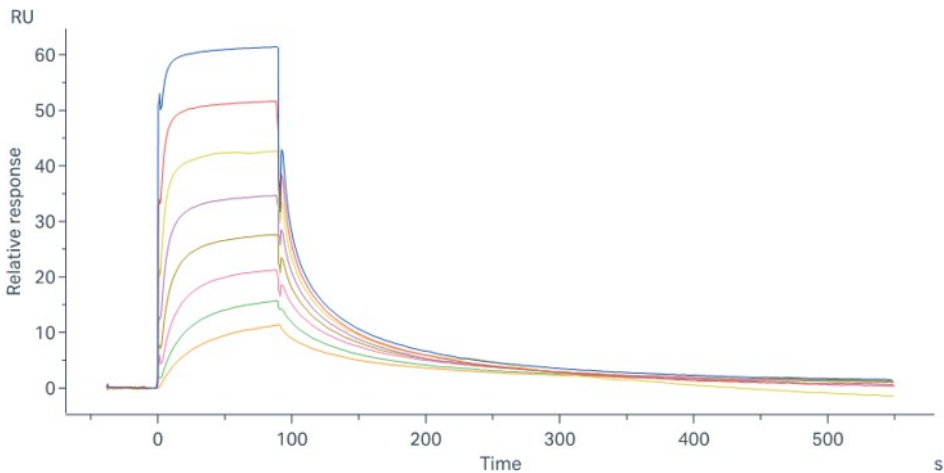
Mouse CD117 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Mouse CD117 Protein, His Tag (Cat. No. CD7-M52H5) is more than 95% and the molecular weight of this protein is around 65-80 kDa verified by SEC-MALS.

Bioactivity-SPR



Mouse CD117 Protein, His Tag (Cat. No. CD7-M52H5) immobilized on CM5 Chip can bind Mouse SCF, His Tag (Cat. No. SCF-M5228) with an affinity constant of 180 nM as determined in a SPR assay (Biacore 8K) (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.

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