

**Synonym**

MERTK,Mer

**Source**

Mouse MERTK, Fc Tag (MEK-M5253) is expressed from human 293 cells (HEK293). It contains AA Gly 19 - Met 497 (Accession # [Q60805-1](#)).

**Molecular Characterization**

MERTK(Gly 19 - Met 497) Q60805-1	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 78.9 kDa. The protein migrates as 100-150 kDa 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 PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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**

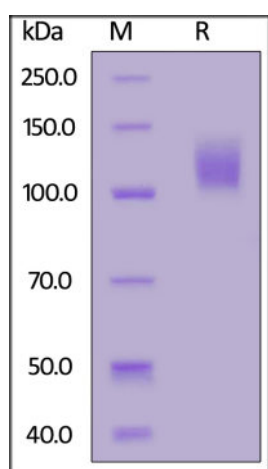
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

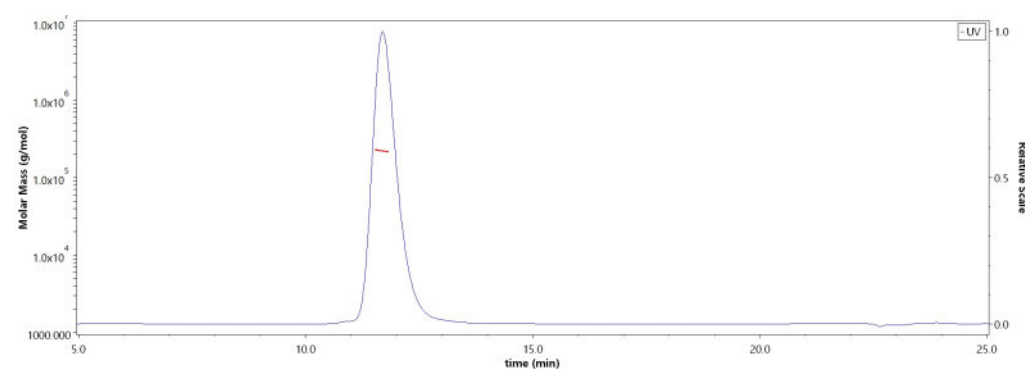
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



Mouse MERTK, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**SEC-MALS**



The purity of Mouse MERTK, Fc Tag (Cat. No. MEK-M5253) is more than 90% and the molecular weight of this protein is around 198-242 kDa verified by SEC-MALS.

[Report](#)

**Background**

Tyrosine-protein kinase Mer(MERTK) is a member of the TYRO3/AXL/MER (TAM) receptor kinase family and encodes a transmembrane protein with two fibronectin type-III domains, two Ig-like C2-type (immunoglobulin-like) domains, and one tyrosine kinase domain. Following activation by ligand, interacts with GRB2 or PLCG2 and induces phosphorylation of MAPK1, MAPK2, FAK/PTK2 or RAC1. MERTK signaling plays a role in various processes such as macrophage clearance of apoptotic cells, platelet aggregation, cytoskeleton reorganization and engulfment. Functions in the retinal pigment epithelium (RPE) as a regulator of rod

outer segments fragments phagocytosis. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces production of suppressors of cytokine signaling SOCS1 and SOCS3.

### **Clinical and Translational Updates**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.