

**Synonym**

MERTK,Mer

**Source**

Human MERTK, Fc Tag(MEK-H5253) is expressed from human 293 cells (HEK293). It contains AA Ala 21 - Ile 505 (Accession # [Q12866-1](#)).

Predicted N-terminus: Ala 21

**Molecular Characterization**

|                                     |                                 |
|-------------------------------------|---------------------------------|
| MERTK(Ala 21 - Ile 505)<br>Q12866-1 | Fc(Pro 100 - Lys 330)<br>P01857 |
|-------------------------------------|---------------------------------|

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 79.1 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**

>90% as determined by SDS-PAGE.

**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.*

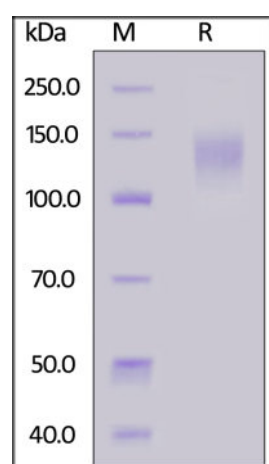
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

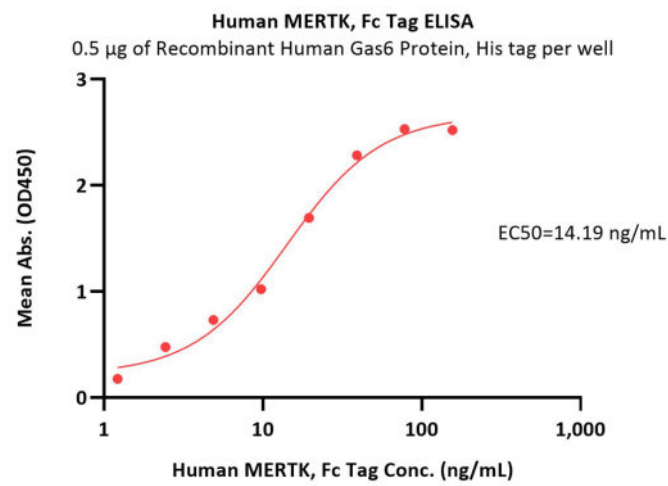
This product is stable after storage at:

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

**SDS-PAGE**

Human MERTK, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Recombinant Human Gas6 Protein, His tag at 5 µg/mL (100 µL/well) can bind Human MERTK, Fc Tag (Cat. No. MEK-H5253) with a linear range of 1-20 ng/mL (QC tested).

## 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.