

## Recombinant Human MERTK/MER Protein (His Tag)

Catalog Number: PKSH033481

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

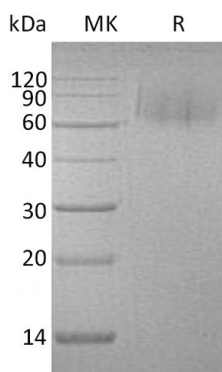
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human MERTK/MER protein Met1-Ala323, with an C-terminal His
<b>Calculated MW</b>	36.0 kDa
<b>Observed MW</b>	60-120 kDa
<b>Accession</b>	Q1RMG3
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Tyrosine-protein kinase Mer (MERTK) is a single-pass type I membrane protein which belongs to the MER/AXL/TYRO3 receptor kinase family. MERTK include two fibronectin type-III domains; two Ig-like C2-type domains; and one tyrosine kinase domain. It can't be expressed in normal B- and T-lymphocytes; but it is usually expressed in numerous neoplastic B- and T-cell lines. MERTK could regulate many physiological processes; such as cell survival; migration; differentiation. It was demonstrated that the MERTK plays critical role in the engulfment and efficient clearance of apoptotic cells; platelet aggregation; and cytoskeleton reorganization. Not only these; it also plays 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. In addition; MERTK could regulate rod outer segments fragments phagocytosis in the retinal pigment epithelium(RPE); deficiency in MERTK are the cause of retinitis pigmentosa.