

## MERTK/Mer Protein, Human, Recombinant (aa 1-323, His)

### General Information

Synonyms:	MER; Receptor tyrosine kinase MerTK; Tyrosine-protein kinase Mer; Proto-oncogene c-Mer; MERTK
Protein Construction:	Met1-Ala323
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q1RMG3
Molecular Weight:	60-120 KDa (reducing condition)
AA Sequence:	Met1-Ala323

### QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris-HCl, 150 mM NaCl, pH 8.0.

### Preparation and Storage

#### Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

#### Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months.

Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

#### Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481