

Recombinant Human Mer / MERTK (aa 578-872)

Catalog Number: 10298-H20B1



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

MER, MGC133349, RP38, c-mer, MERTK

Protein Construction:

A DNA sequence encoding the human MERTK (Q12866) protein kinase domain (Glu 578-Tyr 872) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE.

Endotoxin:

<1.0 EU per µg protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

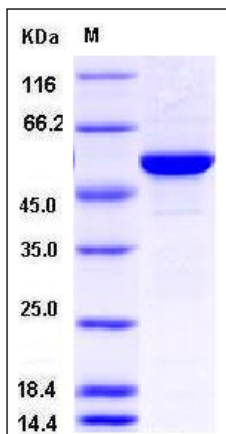
The recombinant human MERTK (aa578-872)/GST chimera consists of 532 amino acids and has a calculated molecular mass of 62 KDa. It migrates as an approximately 50 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from 0.2µm filtered solution of 50mM Tris, 100mM NaCl, pH 7.4, 20%gly, 0.3mM DTT

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

SDS-PAGE:



Usage Guide

Storage:

Store it under sterile conditions at -70°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Mer encoded by a protooncogene, also named N-CAM (neural adhesion molecule)-related kinase (NYK), is a member of the AXL receptor tyrosine kinase subfamily which includes two other members Axl and Tyro3. This transmembrane protein consists of two fibronectin type-III domains, two Ig-like C2-type domains and one tyrosine kinase domain. The three members are typified by a common N-CAM-related extracellular domain and share a common ligand Gas6 (growth arrest-specific gene 6) which is structurally homologous to the anticoagulant protein S. Mer is expressed at high levels in monocytes and cells derived from epithelial and reproductive tissues, and the membrane-bound form can yield soluble form by proteolytic cleavage of the extracellular domain via a metalloproteinase. Binding of Gas6 induces the Mer receptor autophosphorylation and downstream signaling pathways, and consequently carry out diverse functions including the regulation of cell adhesion, migration, and survival. In addition, it seems that Mer plays a critical role in the engulfment and clearance of apoptotic cells, especially the macrophage cells, and accordingly, this receptor is implicated in homeostasis, inflammation, and autoimmune responses, as well as tumorigenesis and malignancy.

References

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