Recombinant Human MERTK/Mer Protein

Catalog Number: PKSH031699



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

Description

Synonyms Tyrosine-protein kinase Mer;Proto-oncogene c-Mer;Receptor tyrosine kinase

MerTK;MERTK;MER;Mer

Species Human

Expression HostHEK293 CellsSequenceMet 1-Ala 499AccessionNP_006334.2Calculated Molecular Weight54.0 kDaObserved molecular weight110-120 kDa

Properties

Tag

Purity > 85 % as determined by reducing SDS-PAGE.

None

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

Storage 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.

Shipping This product is provided as lyophilized powder which is shipped with ice packs.

Formulation Lyophilized from sterile 100mM NaCl, 50mM Tris, pH 7.5

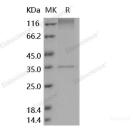
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

Proto-oncogene tyrosine-protein kinase MER (MERTK) is a member of the MER/AXL/TYRO3 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. MERTK is localized in membrane and is no expressed in normal B- and T-lymphocytes but is expressed in numerous neoplastic B- and T-cell lines. This protein is highly expressed in testis; ovary; prostate; lung; and kidney; with lower expression in spleen; small intestine; colon; and liver. MERTK regulates many physiological processes including cell survival; migration; differentiation; and phagocytosis of apoptotic cells (efferocytosis). Ligand binding at the cell surface induces autophosphorylation of MERTK on its intracellular domain that

For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: www.elabscience.com Email: techsupport@elabscience.com

Recombinant Human MERTK/Mer Protein

Catalog Number:PKSH031699



provides docking sites for downstream signaling molecules. MERTK signaling plays a role in various processes such as macrophage clearance of apoptotic cells; platelet aggregation; cytoskeleton reorganization and engulfment. MERTK 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. Defects in MERTK are the cause of retinitis pigmentosa type 38.

For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>