

Datasheet for ABIN7194461

MERTK Protein



Overview

Quantity:	100 μg
Target:	MERTK
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human MERTK/Mer Protein
Sequence:	Met 1-Ala 499
Characteristics:	The mature form of human Mer (NP_006334.2) extracellular domain (Met 1-Ala 499) with five amino acids (DDDDK) at the C-terminus was expressed and purified.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	MERTK
Alternative Name:	MERTK/Mer (MERTK Products)
Background:	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 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.

Synonym: Tyrosine-protein kinase Mer, Proto-oncogene c-Mer, Receptor tyrosine kinase MerTK, MER, Mer

Molecular Weight:

54 kDa

NCBI Accession:

NP_006334

Pathways:

RTK Signaling

Application Details

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 100 mM NaCl, 50 mM Tris, pH 7.5
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	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.