

Recombinant Human MerTK

Catalog No: Cl94

Description Recombinant Human Tyrosine-protein kinase Mer is produced by our Mammalian expression system

and the target gene encoding Met177-Ala499 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name Tyrosine-protein kinase Mer;Proto-oncogene c-Mer;Receptor tyrosine kinase MerTK;MERTK;MER

Accession No. Q12866

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM Tris,150mM NaCl, pH8.0.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence MKINNEEIVSDPIYIEVQGLPHFTKQPESMNVTRNTAFNLTCQAVGPPEPVNIFWVQNSSRVNEQPEKS PSVLTVPGLTEMAVFSCEAHNDKGLTVSKGVQINIKAIPSPPTEVSIRNSTAHSILISWVPGFDGYSPFRN CSIQVKEADPLSNGSVMIFNTSALPHLYQIKQLQALANYSIGVSCMNEIGWSAVSPWILASTTEGAPSVA PLNVTVFLNESSDNVDIRWMKPPTKQQDGELVGYRISHVWQSAGISKELLEEVGQNGSRARISVQVHN

ATCTVRIAAVTKGGVGPFSDPVKIFIPAHGWVDYAPSSTPAPGNAVDHHHHHH

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.

SDS-Page



