# **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 19-497aa

**UniProt No.** Q60805

NCBI Accession No. NP\_032613

Alternative Names

Mertk, Proto-oncogene c-Mer, Receptor tyrosine kinase MerTK, Eyk, Mer, nmf12, Nyk, Tyrosine-protein kinase Mer

# **PRODUCT SPECIFICATION**

Molecular Weight 79.2 kDa (718aa)

**Concentration** 0.5mg/ml (determined by absorbance at 280nm)

#### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

#### Purity

> 95% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

Tag hlgG-His-Tag

Application SDS-PAGE

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

## Description

Mer, also known as Tyrosine-protein kinase Mer, is one of the receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm. It regulates many physiological processes including cell survival, migration, differentiation, and phagocytosis of apoptotic cells. This protein plays a role in various processes such as macrophage clearance of apoptotic cells, platelet aggregation, cytoskeleton reorganization



and engulfment. Mutations in this protein have been associated with disruption of the retinal pigment epithelium (RPE) phagocytosis pathway and onset of autosomal recessive retinitis pigmentosa (RP). Recombinant mouse Mer, fused to hlgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

### **Amino acid Sequence**

GGTAEKWEET ELDQLFSGPL PGRLPVNHRP FSAPHSSRDQ LPPPQTGRSH PAHTAAPQVT STASKLLPPV AFNHTIGHIV LSEHKNVKFN CSINIPNTYQ ETAGISWWKD GKELLGAHHS ITQFYPDEEG VSIIALFSIA SVQRSDNGSY FCKMKVNNRE IVSDPIYVEV QGLPYFIKQP ESVNVTRNTA FNLTCQAVGP PEPVNIFWVQ NSSRVNEKPE RSPSVLTVPG LTETAVFSCE AHNDKGLTVS KGVHINIKVI PSPPTEVHIL NSTAHSILVS WVPGFDGYSP LQNCSIQVKE ADRLSNGSVM VFNTSASPHL YEIQQLQALA NYSIAVSCRN EIGWSAVSPW ILASTTEGAP SVAPLNITVF LNESNNILDI RWTKPPIKRQ DGELVGYRIS HVWESAGTYK ELSEEVSQNG SWAQIPVQIH NATCTVRIAA ITKGGIGPFS EPVNIIIPEH SKVDYAPSST PAPGNTDSM<L EPKSCDKTHT CPPCPAPELL GGPSVFLFPP KPKDTLMISR TPEVTCVVVD VSHEDPEVKF NWYVDGVEVH NAKTKPREEQ YNSTYRVVSV LTVLHQDWLN GKEYKCKVSN KALPAPIEKT ISKAKGQPRE PQVYTLPPSR DELTKNQVSL TCLVKGFYPS DIAVEWESNG QPENNYKTTP PVLDSDGSFF LYSKLTVDKS RWQQGNVFSC SVMHEALHNH YTQKSLSLSP GKHHHHHH>

#### **General References**

Grabiec AM., et al. (2018) Eur J Immunol. 48:855-860. McHenry CL., et al. (2004) Invest Ophthalmol Vis Sci. 45:1456-1463.

# DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.