Certificate of Analysis
MERTK (cMER), 10 µg

Recombinant Human cMer Proto-Oncogene Tyrosine Kinase, GST-tagged

ThermoFisher SCIENTIFIC

Part Number: PV3627
Lot Number: 2136631B
Immediate Storage: -80°C
Shipping Conditions: dry ice

5781 Van Allen Way
Carlsbad, CA 92008
Phone: 760.603.7200
www.thermofisher.com

Description:

Recombinant Human protein, Catalytic Domain (amino acids 578-872), GST-tagged, expressed in insect cells containing additional C-terminal amino acids KGGRADPAFLYKVV (legacy from Gateway® cloning). No special measures were taken to activate this kinase.

Specific Activity:

73 nmoles of phosphate transferred to poly [Glu, Tyr] 4:1 substrate per minute per mg of total protein at 30°C. Activity determined at a final protein concentration of 4 µg/mL.

Concentration:

0.46 mg/mL total protein as measured using the Bradford protein assay with BSA as a standard.

Calculated **7,260 nM.** = 689 nM

Aliases:

MER, c-mer

Storage and Handling:

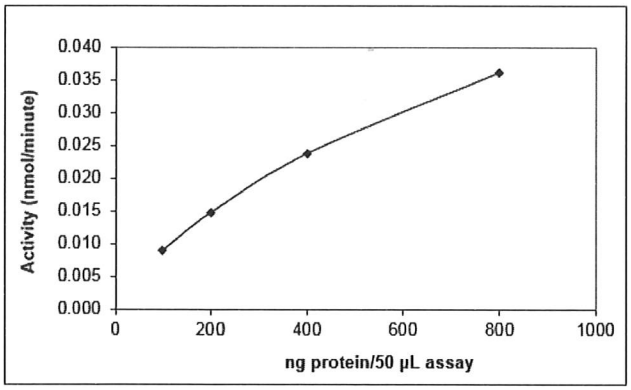
For maximum recovery please spin prior to use. Unless noted below, aliquots of the 5 ug, 10ug and 20ug sizes of kinase are not recommended as materials can be used in original packaging until exhausted. For larger sizes, the number of freeze/thaws may be reduced by preparing aliquots, aliquots below 20 µL are not recommended. **Please never store a kinase diluted.** If properly stored at −80°C, this product is guaranteed for 6 months from date of purchase.

Storage Buffer:

50 mM Tris (pH 7.5), 150 mM NaCl, 0.5 mM EDTA, 0.02% Triton® X–100, 2 mM DTT and 50% Glycerol.

QUALITY ASSURANCE

MERTK (cMER) Activity Graph



Gel Information for MERTK (cMER)

Page Description: The SDS-PAGE and/or Native PAGE were run on 4-20% Tris-Glycine Novex® gels (Catalog #: EC6025BOX).

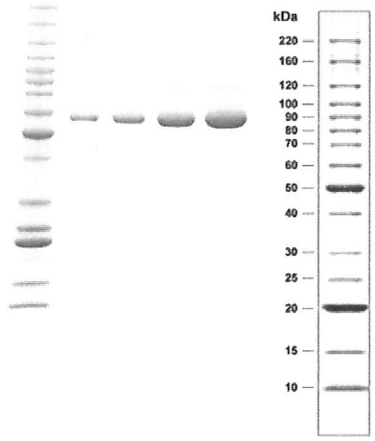
Lane 1: Invitrogen™ BenchMark™ Protein Ladder (Catalog #: 10747-012).

Lane 2: 0.5 µg MERTK (cMER)

Lane 3: 1.0 µg MERTK (cMER)

Lane 4: 2.5 µg MERTK (cMER)

Lane 5: 5.0 µg MERTK (cMER)



Dilution Buffer:

20 mM Tris (pH 7.5), 0.02% Triton® X−100, 0.1 mg/mL BSA, 2 mM DTT, 0.5 mM Na_3VO_4 and 10% Glycerol.

Assay Conditions:

MERTK (cMER) was pre-diluted in enzyme dilution buffer and assayed in 12.5 mM Tris (pH 7.5), 10 mM $MgCl_2$, 1 mM EGTA, 0.5 mM Na_3VO_4, 5 mM β−glycerophosphate, 2 mM DTT, 0.01% Triton® X–100, 200 µM ATP, 200 µg/mL poly [Glu, Tyr] 4:1 substrate and trace [^{32}P]-γ-ATP for 10 minutes at 30°C.

Purity:

95% as determined by a Coomassie® blue stained SDS-PAGE gel.

Molecular Weight:

63.4 kDa. Calculated from the protein sequence(s).

Mass Spectrometry:

MERTK (cMER) was subjected to proteolytic digest followed by mass spec analysis. The resulting MS/MS data verified MERTK (cMER) identity by comparison against the amino acid sequence(s) of the recombinant protein.