MAPKAPK3, GST-tag Recombinant

Catalog: 40117 Lot: 230629

Product Information

Description: Recombinant human full length MAPKAPK3 (MAP kinase-activated protein kinase 3).

This construct contains an N-terminal GST-tag. The recombinant protein was affinity

purified and is active.

Species: Human

Construct: MAPKAPK3 (GST-Full Length)

Concentration: 0.10 mg/ml

Expression System: Sf9
Purity: ≥90%

Format: Aqueous buffer solution.

Formulated In: 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1

mM PMSF, 25% glycerol

MW: 69 kDa

Genbank Accession: NM_004635

Stability: At least 6 months at -80°C.

Storage: -80°C

Instructions for Use: Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before

opening. Aliquot into small volumes and flash freeze for long term storage. Avoid

multiple freeze/thaw cycles.

Specific Activity: 553 pmol/min/μg

Assay Conditions: MAPKAPK3 activity was measured by using the HSP27tide synthetic peptide

(RRLNRQLSVA-amide) at a working concentration of 1 mg/ml in distilled water, in a [33P]-ATP based assay. Reaction was initiated by mixing increasing amounts of MAPKAPK3 with 1250 pmoles of [33P]-ATP in 5 mM MOPS, pH 7.2, 2.5 mM β -glycerol-phosphate, 5 mM MgCl₂, 1 mM EGTA, 0.4 mM EDTA, 50 ng/ μ l BSA prepared with 50

 μ M DTT, 50 μ M ATP and substrate at a final concentration of 200 μ g/ml.

The reaction was initiated by addition of [33P]-ATP Assay Cocktail, followed by a 15-minute incubation at 30°C. The reaction was terminated by spotting the reaction mixture on phosphocellulose P81 paper, air-dry and three 10-minute washes with 1% phosphoric acid solution. Radioactivity was measured in a scintillation counter. The corrected activity (RLU) was calculated by removing the blank value for each sample. The Kinase Specific Activity was calculated as follows: RLU / [(specific activity of [33P]-ATP in cpm/pmol)*(Reaction time in min)*(Enzyme amount in μg or μg) * [(Reaction Volume)] / (Spot Volume)]. The blank was determined from a "no substrate" sample by

replacing the substrate solution with an equal volume of distilled water.

Applications: Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.



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Quality Control Data



