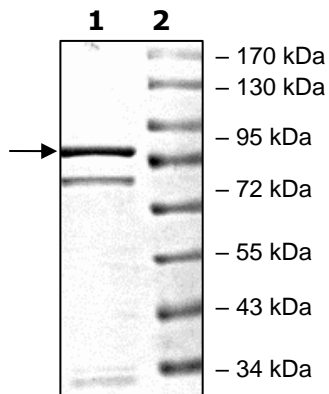


Product Information

Description:	Recombinant human full length MAPKAPK5 (MAP kinase-activated protein kinase 5). This construct contains an N-terminal GST-tag. The recombinant protein was affinity purified and is active.
Species:	Human
Construct:	MAPKAPK5 (GST-Full Length)
Concentration:	0.10 mg/ml
Expression System:	Sf9
Purity:	80%
Format:	Aqueous buffer solution.
Formulated In:	50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM Glutathione, 0.1 mM EDTA, 0.25 mM DTT 0.1 mM PMSF, 25% glycerol
MW:	79 kDa
Genbank Accession:	NM_003668
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:	172 pmol/min/μg
Assay Conditions:	MAPKAPK5 activity was measured by using the HSP27tide synthetic peptide (RRLNRQLSVA-amide) at a working concentration of 1 mg/ml, in a [33P]-ATP based assay. Reaction was initiated by mixing increasing amounts of MAPKAPK5 with 1250 pmoles of [33P]-ATP in 5 mM MOPS, pH 7.2, 2.5 mM β-glycerol-phosphate, 5 mM MgCl ₂ , 2.5 mM MnCl ₂ , 1 mM EGTA, 0.4 mM EDTA, 50 ng/μl BSA prepared with 50 μM DTT, 50 μM ATP and substrate at a final concentration of 200 μg/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: $RLU / [(specific\ activity\ of\ [33P]-ATP\ in\ cpm/pmol) * (Reaction\ time\ in\ min) * (Enzyme\ amount\ in\ \mu g\ or\ mg)] * [(Reaction\ Volume) / (Spot\ Volume)]$. 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.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



Specific Activity

