SGK3, GST-tag Recombinant

Product Information

Description:	Recombinant full length human SGK3 (serine/threonine-protein kinase 3). This construct contains an N-terminal GST-tag. The recombinant protein was affinity purified and is active.
Species:	Human
Construct:	SGK3 (GST-Full Length)
Concentration:	0.10 mg/ml
Expression System:	Sf9
Purity:	85% (Purity calculation does not include co-purifying Glutathione-binding proteins.)
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 EDTA, 0.1 mM PMSF, 25% glycerol.
MW:	82 kDa
Genbank Accession:	NM_013257
Stability:	At least 6 months at -80°C. Avoid freeze/thaw cycles.
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:	90 pmol/min/µg
Assay Conditions:	SGK3 activity was measured by using the Akt (PKB) synthetic peptide (CKRPRAASFAE) diluted in distilled water to a working concentration of 1 mg/ml, in a [33P]-ATP based assay. Reaction was initiated by mixing increasing amounts of SGK3 with 1250 pmoles of [33P]-ATP in 5 mM MOPS, pH 7.2, 2.5 mM β -glycerol-phosphate, 5 mM MgCl ₂ , 1 mM EGTA, 0.4 mM EDTA, 50 ng/µl BSA, 5% glycerol 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 µg 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



