Product Information

Construct:	PKMYT1 (GST-Full Length)
Concentration:	0.10 mg/ml
Species:	Human
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
Expression System:	Sf9
Format:	Aqueous buffer solution
Stability:	At least 6 months at -80°C. Avoid freeze/thaw cycles.
Storage:	-80°C
Genbank Accession:	NM_004203
MW:	93 kDa
Purity:	85%
Specific Activity:	10 pmol/min/μg
Assay Conditions:	The kinase activity was measured using the ADP-Glo [™] Kinase Assay Kit (Promega; Cat# V9101) which quantifies the amount of ADP produced. The ADP-Glo [™] Reagent is added to terminate the reaction and deplete the remaining ATP. The Kinase Detection Reagent is then added to convert ADP to ATP and to measure the newly synthesized ATP using a luciferase reaction. PKMYT1 kinase activity was measured by using unactive CDK1 diluted in 50 mM Tris- HCl, pH 7.5, 50 mM NaCl, 0.25 mM DTT, 0.1 mM EDTA, 25% glycerol to a final concentration of 0.1 mg/ml. Reaction was initiated by mixing increasing amounts of the PKMYT1 with 25 µM ATP in 40 mM Tris-HCl, pH 7.4, 20 mM MgCl ₂ , 0.1 mg/ml BSA, 250 µM DTT and substrate with a final concentration of 0.5 µg/ml. After a 40-minute incubation at 37°C, the reaction was terminated by addition of the AMP-Glo [™] Reagent followed by a subsequent 40-minute incubation at room temperature. Kinase Detection Reagent was then added and incubated for another 30 minutes. Detection of luminescence was measured using the Luminescence Module Protocol on GloMax [®] -Multi Microplate reader. The corrected activity (RLU) was calculated by removing the blank value for each sample divided by the (specific activity of ADP in RLU/pmol)*(Reaction time in min)*(Enzyme amount in µg or
Applications:	mg). The blank was determined from a "no kinase" sample by replacing the enzyme working solution with an equal volume of Kinase Dilution Buffer IX (1X). Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.



Quality Control Data



