Catalog: 40131

Lot: 220901

## **Product Information**

Construct:	MSK1 (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_004755
MW:	120 kDa
Purity:	70%
Specific Activity:	9.9 pmol/min/µg
Assay Conditions:	The kinase activity of the complex was measured using the ADP-Glo™ Kinase Assay
	kit (Promega; Cat#V9101) which quantifies the amount of ADP produced. The ADP-
	Glo <sup>™</sup> 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.
	Kinase activity was measured RSK-sub peptide substrate (KRRRLSSLRA) diluted in
	water to a final concentration of 1 mg/ml. Reaction was initiated by mixing
	increasing amounts of the MSK1 with 0.125 $\mu$ M ATP in 40 mM Tris-HCl, pH 7.4, 20
	mM MgCl <sub>2</sub> , 0.1 mg/ml BSA, 250 $\mu$ M DTT with the 1 mg/ml substrate.
	After a 40-minute incubation at 37°C, the reaction was terminated by addition of
	the AMP-Glo <sup>™</sup> 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 <sup>®</sup> -Multi Micorplate 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 $\mu$ g or 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).
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.



## MSK1, GST-tag Recombinant

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## Quality Control Data



