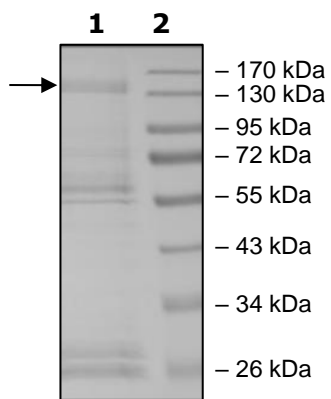


Product Information

Description:	Recombinant human PLK4 (polo like kinase 4), encompassing amino acids 1-836. This construct contains an N-terminal GST-tag. The recombinant protein was affinity purified and is kinase active.
Species:	Human
Construct:	PLK4 (GST-1-836)
Concentration:	0.05 mg/ml
Expression System:	Sf9
Purity:	70%
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:	140 kDa
Genbank Accession:	NM_014264
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:	1.8 pmol/min/μg
Assay Conditions:	PLK4 activity was measured by using myelin basic protein (MBP) substrate diluted in 100 mM MOPS buffer (pH 6.5) to a final concentration of 0.5 mg/ml in the ADP Glo™ assay (Promega #V9101). Reaction was initiated by mixing increasing amounts of the PLK4 with 25 μM ATP in 40 mM Tris-HCl, pH 7.4, 20 mM MgCl ₂ , 0.1 mg/ml BSA prepared with 250 μM DTT and substrate at final concentration of 25 μg/ml substrate. 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 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.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



Specific Activity

