



Human PLK1 (phospho S137) peptide (DAG-P1914)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Serine/threonine-protein kinase that performs several important functions throughout M phase of the cell cycle, including the regulation of centrosome maturation and spindle assembly, the removal of cohesins from chromosome arms, the inactivation of APC/C inhibitors, and the regulation of mitotic exit and cytokinesis. Required for recovery after DNA damage checkpoint and entry into mitosis. Required for kinetochore localization of BUB1B. Phosphorylates SGOL1. Required for spindle pole localization of isoform 3 of SGOL1 and plays a role in regulating its centriole cohesion function. Phosphorylates BORA, and thereby promotes the degradation of BORA. Contributes to the regulation of AURKA function. Regulates TP53 stability through phosphorylation of TOPORS.
Specificity	Placenta and colon.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CDC5/Polo subfamily. Contains 2 POLO box domains. Contains 1 protein kinase domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	PLK1 polo-like kinase 1 [Homo sapiens (human)]
Official Symbol	PLK1

Synonyms	PLK1; polo-like kinase 1; PLK; STPK13; serine/threonine-protein kinase PLK1; PLK-1; polo like kinase; polo (Drosophila)-like kinase; serine/threonine-protein kinase 13; cell cycle regulated protein kinase;
Entrez Gene ID	5347
mRNA Refseq	NM_005030.3
Protein Refseq	NP_005021.2
UniProt ID	P53350
Chromosome Location	16p12.2
Pathway	APC/C-mediated degradation of cell cycle proteins, organism-specific biosystem; APC/C:Cdh1 mediated degradation of Cdc20 and other APC/C:Cdh1 targeted proteins in late mitosis/early G1, organism-specific biosystem; Activation of APC/C and APC/C:Cdc20 mediated degradation of mitotic proteins, organism-specific biosystem; Activation of NIMA Kinases NEK9, NEK6, NEK7, organism-specific biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Cell cycle, o
Function	ATP binding; anaphase-promoting complex binding; kinase activity; microtubule binding; protein binding; protein kinase activity; protein kinase binding; protein serine/threonine kinase activity; protein serine/threonine kinase activity; protein serine/thr