



Anti-PLK1 (Serine/threonine-protein kinase PLK1) (Polo-like kinase 1) Polyclonal Antibody

Category: Polyclonal Antibody

Catalog#: AB1F076

Antigen Synonym: PLK

Species Reactivity: Human, mouse, rat

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to N- residues of human PLK1(Serine/threonine-protein kinase PLK1) (Polo-like kinase 1)

Description: PLK1(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. PLK1 is activated by serine and threonine phosphorylation. PLK1 interacts with CEP170 and EVI5. PLK1 interacts and phosphorylates ERCC6L. PLK1 accumulates to a maximum during the G2 and M phases, declines to a nearly undetectable level following mitosis and throughout G1 phase, and then begins to accumulate again during S phase. Autophosphorylation and phosphorylation of Ser-137 are not significant events during activation of PLK1 in M phase.

Reference:

Hamanaka,R., et al, Cell Growth Differ. 5 (3), 249-257 (1994) Lake,R.J. and Jelinek,W.R., Mol. Cell. Biol. 13 (12), 7793-7801 (1993) Golsteyn,R.M., et al, J. Cell. Sci. 107 (PT 6), 1509-1517 (1994) Brauninger,A., et al, Oncogene 11 (9), 1793-1800 (1995) Uchiumi,T., et al, J. Biol. Chem. 272 (14), 9166-9174 (1997) Lee,K.S. and Erikson,R.L., Mol. Cell. Biol. 17 (6), 3408-3417 (1997) Jang,Y.J., et al, J. Biol. Chem. 277 (46), 44115-44120 (2002) Wind,M., et al, Proteomics 2 (11), 1516-1523 (2002)