Product Name: Plk1 Rabbit Polyclonal Antibody
Catalog #: APRab16275

Summary

Production Name	Plk1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	PLK1
Alternative Names	PLK1; PLK; Serine/threonine-protein kinase PLK1; Polo-like kinase 1; PLK-1; Serine/threonine-protein kinase 13; STPK13
Gene ID	5347.0
SwissProt ID	P53350.Synthesized peptide derived from Plk1 . at AA range: 80-160

Application

Dilution Ratio	WB 1:500-1:2000. ELISA: 1:20000.
Molecular Weight	68kD

Background

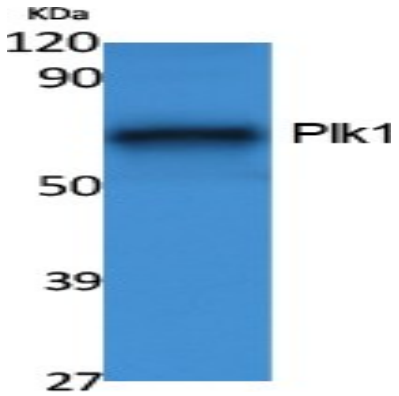
The Ser/Thr protein kinase encoded by this gene belongs to the CDC5/Polo subfamily. It is highly expressed during mitosis

and elevated levels are found in many different types of cancer. Depletion of this protein in cancer cells dramatically inhibited cell proliferation and induced apoptosis; hence, it is a target for cancer therapy. [provided by RefSeq, Sep 2015],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,developmental stage: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.,enzyme regulation:Activated by serine and threonine phosphorylation.,function: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.,induction:By growth-stimulating agents.,PTM:Autophosphorylation and phosphorylation of Ser-137 are not significant events during activation of PLK1 in M phase.,PTM:Catalytic activity is enhanced by phosphorylation of Thr-210 and/or Ser-137.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CDC5/Polo subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 POLO box domains.,subunit:Interacts with CEP170 and EVI5. Interacts and phosphorylates ERCC6L. Interacts with FAM29A.,tissue specificity:Placenta and colon.,

Research Area

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Oocyte meiosis;Progesterone-mediated oocyte maturation;

Image Data



Western Blot analysis of extracts from NIH-3T3 cells, using Plk1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Note

For research use only.