

## Immunotag™ Plk1 (phospho Ser137) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0434
Product Description	Immunotag™ Plk1 (phospho Ser137) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Plk1 (Ser137)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human Plk1 (phospho Ser137)
Specificity	Phospho-Plk1 (S137) Polyclonal Antibody detects endogenous levels of Plk1 protein only when phosphorylated at S137.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PLK1
Accession No.	P53350 Q07832 Q62673
Alternate Names	PLK1; PLK; Serine/threonine-protein kinase PLK1; Polo-like kinase 1; PLK-1; Serine/threonine-protein kinase 13; STPK13

## Antibody Specification

Description	polo like kinase 1(PLK1) Homo sapiens 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],
Cell Pathway/ Category	Cell_Cycle_G1S,Cell_Cycle_G2M_DNA,Oocyte meiosis,Progesterone-mediated oocyte maturation,
Protein Expression	Brain,Colon,Lung,Placenta,
Subcellular Localization	kinetochore,chromatin,synaptonemal complex,spindle pole,condensed nuclear chromosome outer kinetochore,nucleus,nucleoplasm,nucleolus,cytoplasm,centrosome,spindle,cytosol,spindle microtubule,microtubule cyto
Protein Function	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.,
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