

# PLK1

## Polyclonal ANTIBODY

Catalog Number: 10305-1-AP

2 Publications

### Basic Information

**Catalog Number:**  
10305-1-AP

**Size:**  
24 µg/150 µl

**Source:**  
Rabbit

**Isotype:**  
IgG

**Purification Method:**  
Antigen affinity purification

**Immunogen Catalog Number:**  
AG0284

**GenBank Accession Number:**  
BC002369

**GeneID (NCBI):**  
5347

**Full Name:**  
polo-like kinase 1 (Drosophila)

**Calculated MW:**  
68 kDa

**Observed MW:**  
62 kDa

**Recommended Dilutions:**

WB 1:500-1:1000

IHC 1:50-1:500

### Applications

**Tested Applications:**

IHC, WB, ELISA

**Cited Applications:**

IHC, WB

**Species Specificity:**

human,mouse,rat

**Cited Species:**

human

**Positive Controls:**

WB : U2OS cells; MDA-MB-453s cells

IHC : human testis tissue; human cervical cancer tissue, human placenta tissue

### Background Information

PLK1(Polo-like kinase 1), also named as PLK and STPK13, belongs to the protein kinase superfamily, Ser/Thr protein kinase family and CDC5/Polo subfamily. PLK1 is a Serine/threonine-protein kinase that performs several important functions throughout Mphase 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. The localization of Polo changes during the cell cycle. In interphase, Polo shows a mostly diffuse cytoplasmic localization. Polo becomes concentrated on centrosomes from early prophase and appears on centromeres or kinetochores from late prophase, before nuclear envelope breakdown (NEB). After anaphase onset, Polo relocates to the central spindle and remains enriched at the midbody ring in late stages of cytokinesis (PMID: 29167465).

### Notable Publications

Author	Pubmed ID	Journal	Application
Yixi Xu	29106372	Elife	WB
Ka-Kui Chan	29663364	Int J Cancer	IHC

### Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

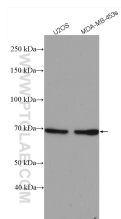
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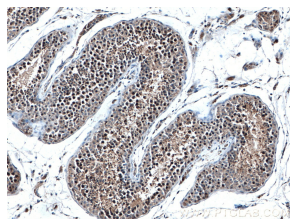
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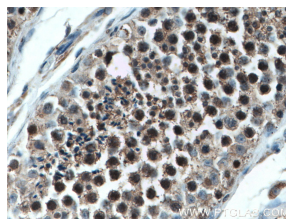
## Selected Validation Data



U2OS cells were subjected to SDS PAGE followed by western blot with 10305-1-AP (PLK1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours



Immunohistochemistry of paraffin-embedded human testis tissue slide using 10305-1-AP (PLK1 antibody) at dilution of 1:200 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



Immunohistochemistry of paraffin-embedded human testis tissue slide using 10305-1-AP (PLK1 antibody) at dilution of 1:200 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer(pH9).