

## Product datasheet for TA319250

### PLK1 Rabbit Polyclonal Antibody

#### Product data:

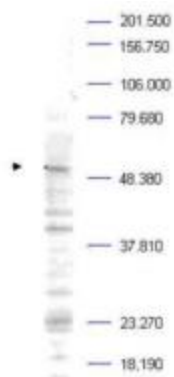
Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1:3,000 - 1:12,000, WB: 1:200 - 1:2,000, IHC: 1:200 - 1:1,000
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Anti-Polo-like Kinase pT210 Antibody was produced by repeated immunizations with a synthetic phospho peptide corresponding to aa 205-214 of Human Polo-like kinase 1 (Plk1) protein.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	polo like kinase 1
Database Link:	<a href="#">NP_005021</a> <a href="#">Entrez Gene 5347 Human</a> <a href="#">P53350</a>
Synonyms:	PLK; STPK13
Note:	Polo-like Kinase pT210 Antibody detects phosphorylated Plk1 protein. Polo-like kinase 1, also known as Plk-1, serine-threonine protein kinase 13 and STPK13, may be required for cell division and have a role during G <sub>1</sub> or S phase and is associated with the phosphorylation of cyclin B <sub>1</sub> . Phosphorylation of Plk-1 on T210 contributes to proper mitotic progression. Plk-1 has a nuclear localization and accumulates to a maximum during the G <sub>2</sub> and M phases, declines to a nearly undetectable level following mitosis and throughout G <sub>1</sub> phase, and then begins to accumulate again during S phase. Plk-1 is a member of the Ser/Thr protein kinase family and the CDC5/Polo subfamily and contains 2 POLO box domains.


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**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation

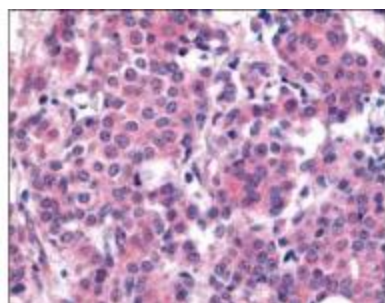
## Product images:



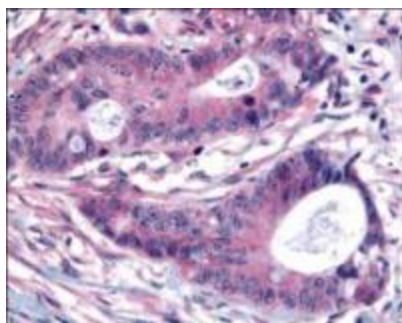
WB analysis using Anti-Plk-1 pT210 antibody to detect endogenous protein present in a Mouse A20 whole cell lysate (arrowhead). Comparison to a molecular weight marker indicates a band of ~68 kDa corresponding to Plk-1 protein. It is suggested to use a nuclear extract from synchronized cells to greatly increase the abundance of this protein in preparations. The blot was incubated with a 1:500 dilution of the antibody at RT followed by detection using standard techniques.



WB analysis to detect endogenous and recombinant protein present in HeLa cell lysates transfected with various plk-1 mutation constructs. Blots were reacted with anti-Plk-1 pT210 (panel A) and pan reactive anti-Plk-1 (panel B). Using a 1:1000 dilution, anti-Plk-1 pT210 detects a single band corresponding to endogenous plk-1, but does not detect recombinant forms of the protein presumably because of a lack of phosphorylation in these mutants.



Affinity Purified Plk1 pT210 was used at a 1:200 dilution to detect Plk1 by immunohistochemistry in human breast carcinoma tumor tissue. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Alan Yen, LifeSpanBiosciences, Seattle, WA.



Affinity Purified Plk1 pT210 was used at a 1:200 dilution to detect Plk1 by immunohistochemistry in human colon carcinoma tumor tissue. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Alan Yen, LifeSpanBiosciences, Seattle, WA.