

Phospho-Thr210 Polo-like Kinase 1 Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1120**Specification**

Phospho-Thr210 Polo-like Kinase 1 Antibody - Product Information

Application	WB
Primary Accession	P53350
Reactivity	Human, Rat
Predicted	Bovine, Mouse, Monkey, Xenopus, Zebrafish
Host	Rabbit
Clonality	polyclonal
Calculated MW	66 KDa

Phospho-Thr210 Polo-like Kinase 1 Antibody - Additional Information

Gene ID	5347
Gene Name	PLK1
Other Names	
Serine/threonine-protein kinase PLK1, Polo-like kinase 1, PLK-1, Serine/threonine-protein kinase 13, STPK13, PLK1, PLK	

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr210 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephospho-peptide affinity columns.

Antibody Specificity

Specific for ~66k PLK phosphorylated at Thr210. Immunolabeling of the PLK band is completely blocked by λ -phosphatase treatment.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Thr210 Polo-like Kinase 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

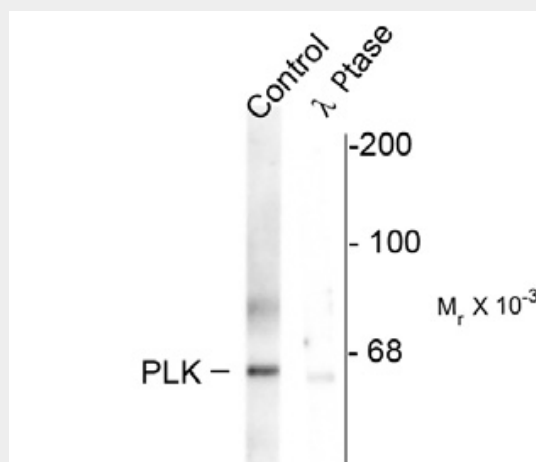
Blue Ice

Phospho-Thr210 Polo-like Kinase 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-Thr210 Polo-like Kinase 1 Antibody - Images



Western blot of rat synaptic membrane showing specific immunolabeling of the ~66 k PLK protein phosphorylated at Thr210 (control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that it was incubated in λ-Ptase (1200 units for 30 min) before being exposed to the phospho-Thr210 PLK antibody. The immunolabeling is completely eliminated by treatment with λ-Ptase.

Phospho-Thr210 Polo-like Kinase 1 Antibody - Background

Polo-like kinases are important regulators of cell cycle progression. PLK1 is a highly conserved Ser/Thr kinase that has essential roles in the formation of mitotic bipolar spindles (van Vugt et al., 2004). Deregulated expression of PLK's is detected in many types of cancer and associated with oncogenesis (Takei et al., 2005). It has been proposed that PLK1 function is altered at different stages of mitosis through consecutive phosphorylation events at Ser137 and Thr210 (van de Weerd et al., 2005).

Phospho-Thr210 Polo-like Kinase 1 Antibody - References

- van Vugt MA, van de Weerd BC, Vader G, Janssen H, Calafat J, Klomp maker R, Wolthuis RM, Medema RH (2004) Polo-like kinase 1 is required for bipolar spindle formation but is dispensable for anaphase promoting complex cdc20 activation and initiation of cytokinesis. *J. Biol. Chem.* Aug 27;279(35):36841-54.
- Takai N, Hamanaka R, Yoshimatsu J, Miyakawa I (2005) Polo-like kinases and cancer. *Oncogene* Jan 10; 24(2): 287-91.
- van de Weerd BC, van Vugt MA, Lindon C, Kauw JJ, Rozendaal MJ, Klomp maker R, Wolthuis RM, Medema RH (2005) Uncoupling anaphase-promoting complex/cyclosome activity from spindle assembly checkpoint control by deregulating polo-like kinase 1. *Mol. Cell Biol.* Mar; 25(5):2031-44.