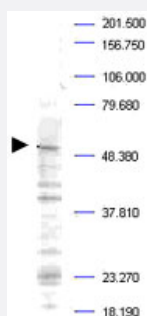


PLK1 (phospho T210) polyclonal antibody

Catalog # PAB10069

Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis is shown using PLK1 (phospho T210) polyclonal antibody (Cat # PAB10069) to detect endogenous protein present in a Mouse A-20 whole cell lysate (arrowhead).

Comparison to a molecular weight marker indicates a band of ~68 kDa corresponding to PLK1 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 room temperature followed by detection using standard techniques.

Personal communication Steven Pelech, Kinexus Inc. Vancouver, BC.

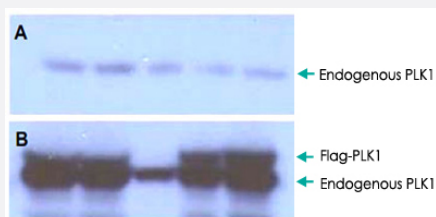
Western Blot (Cell lysate)

Western blot analysis is shown to detect endogenous and recombinant protein present in HeLa cell lysates transfected with various PLK1 mutation constructs. Blots were reacted with PLK1 (phospho T210) polyclonal antibody (Cat # PAB10069, panel A) and pan reactive anti-PLK1 (panel B).

Transfected cells were treated with 1 uM nocodazole followed by cell collection, lysate preparation, SDS-PAGE and western blotting.

Using a 1:1000 dilution, PLK1 (phospho T210) polyclonal antibody (Cat # PAB10069) 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.

Personal communication Hai Jiang, Northwestern Univ.

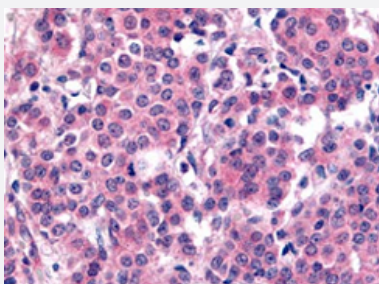


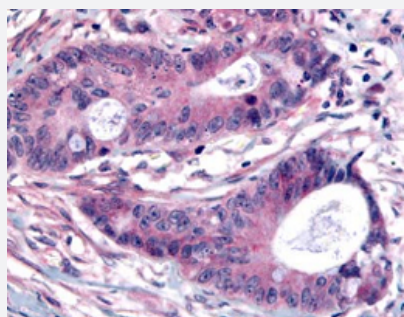
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of PLK1 (phospho T210) polyclonal antibody (Cat # PAB10069) was used at a 1 : 200 dilution to detect PLK1 by immunohistochemistry in human breast carcinoma tissue.

Tissue was formalin-fixed and paraffin embedded.

Personal Communication, Alan Yen, Life Span Biosciences, Seattle, WA.





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Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of PLK1.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding T210 of human PLK1.
Host	Rabbit
Reactivity	Chicken, Chimpanzee, Clawed frog, Dog, Flies, Human, Mouse, Pig, Rat
Specificity	This antibody is specific to phosphorylated human Plk-1 protein at the pT210 residue. Minimal reactivity is expected with the non-phosphorylated form of the protein.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:3000-1:12000) Western Blot (1:200-1:2000) Immunohistochemistry (1:200-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

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Personal Communication, Alan Yen, Life Span Biosciences, Seattle, WA.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PLK1

Entrez GeneID	5347
Protein Accession#	P53350;NP_005021
Gene Name	PLK1
Gene Alias	PLK, STPK13
Gene Description	polo-like kinase 1 (Drosophila)

Omim ID	602098
Gene Ontology	Hyperlink
Other Designations	cell cycle regulated protein kinase polo (Drosophia)-like kinase polo like kinase polo-like kinase

Publication Reference

- [Polo-like kinase-1 controls recovery from a G2 DNA damage-induced arrest in mammalian cells.](#)
van Vugt MA, Bras A, Medema RH.
Molecular Cell 2004 Sep; 15(5):799.
- [Polo-like kinase 1 is overexpressed in prostate cancer and linked to higher tumor grades.](#)
Weichert W, Schmidt M, Gekeler V, Denkert C, Stephan C, Jung K, Loening S, Dietel M, Kristiansen G.
The Prostate 2004 Aug; 60(3):240.
- [Polo-like kinase-1 is required for bipolar spindle formation but is dispensable for anaphase promoting complex/Cdc20 activation and initiation of cytokinesis.](#)
van Vugt MA, van de Weerd BC, Vader G, Janssen H, Calafat J, Klompmaker R, Wolthuis RM, Medema RH.
The Journal of Biological Chemistry 2004 Aug; 279(35):36841.

Pathway

- [Cell cycle](#)

Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Lung Neoplasms](#)
- [Neoplasm Recurrence](#)

- [Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)