

## PLK1 Rabbit Anti-Human Polo-Like Kinase 1 Phospho-Thr210 Affinity Purified pAb

Catalog No. CSI10181 Quantity: 50 μI

CSI10182 200 μI

Alternate Names: PLK, STPK13, cell cycle regulated protein kinase, polo (Drosophia)-like kinase, polo like

kinase, polo-like kinase

**Description:** PLK-1 (polo-like kinase 1) is a member of the serine/threonine protein kinase family,

cdc5/polo subfamily. Highly homologous to polo-like kinase (Drosophila), PLK-1 contains two polo box domains with a predicted molecular weight of 68 kD. This nuclear protein is highly expressed in placenta and colon and has been shown to regulate cdc2/cyclin B through phosphorylation and activation of cdc25c phosphatase. PLK-1 may also be required for cell division; depletion of PLK-1 results in apoptosis. PLK-1 is upregulated by growth stimulating agents and is regulated by cell cycle position (highest in G2/M phase, declining to nearly undetectable levels after mitosis and throughout G1). PLK-1 is

modified by phosphorylation (Thr210 is the major phosphorylation site in activated PLK-1 from mitotic cells) and has been shown to interact with nuclear distribution gene C. The Poly6186 antibody recognizes human phosphorylated PLK-1 (Thr210) and has been shown to be useful for Western blotting. The Poly6186 antibody cross-reacts with an unknown kinase in non-mitotic cells. To increase specificity, it is recommended that the Poly6186 antibody be used for Western blotting after immunoprecipitation with a pan-

specific PLK-1 antibody (clone 3F8).

**Gene ID:** 5347

Host: Rabbit

Immunogen: Modified peptide

Isotype: Rabbit IgG

Clone: Poly6186

**Formulation:** This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09%

sodium azide and 50% glycerol. Precaution: Sodium azide is a poisonous and hazardous

substance which should be handled by trained staff only.

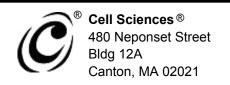
Fax: 781-828-0542

**Purification:** The antibody was purified by antigen-affinity chromatography.

Reactivity: Human

Applications: Western Blot, IF

Recommended Usage:



Toll Free: 888-769-1246 E-mail: info@cellsciences.com
Phone: 781-828-0610 Website: www.cellsciences.com



Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10  $\mu$ l per 5 ml antibody dilution buffer for each minigel. It is recommended that the reagent be titrated for optimal performance for each application.

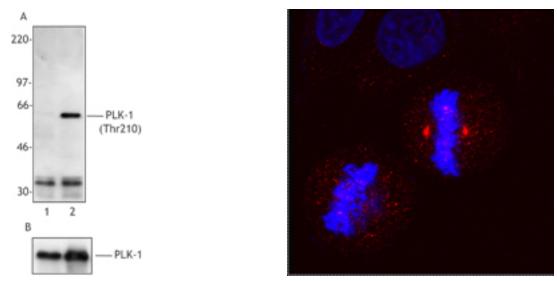
## Storage & Stability:

Upon receipt, store frozen at -20°C. Avoid repeated freeze-thaw cycles.

Panel A. Extracts from untreated Hela cells (Lane 1) or overnight nocodazole-treated Hela cells (Lane 2) were immunoprecipitated with the pan-PLK monoclonal antibody (clone 3F8), and then western blotted with Poly6186 against phosphorylated PLK-1 (Thr210). Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system. Panel B. Extracts from untreated Hela cells (Lane 1) or overnight nocodazole-treated Hela cells (Lane 2) in Panel A were stripped and re-probed with a polyclonal antibody against pan-PLK-1 (Poly6185) to document equivalent loading of the PLK-1 protein.

Immunofluorescent microscope analysis of nocodazole treated Hela cells (10µM for overnight), using PLK-1 Phosphorylated (Thr210) polyclonal antibody (red).

Nuclei were stain with DAPI (blue).



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Toll Free: 888-769-1246 E-mail: info@cellsciences.com
Phone: 781-828-0610 Website: www.cellsciences.com
Fax: 781-828-0542