



## PLK1 (phospho Thr210 ) Antibody

CATALOG NUMBER: 50-249

### Specifications

<b>SPECIES REACTIVITY:</b>	Bovine, Dog, Human, Mouse, Rat, Xenopus, Zebrafish
<b>TESTED APPLICATIONS:</b>	WB
<b>APPLICATIONS:</b>	The antibody has been directly tested for reactivity in Western blots in rat and human tissues. It is anticipated that the antibody will react with bovine, canine, mouse, non-human primate, Xenopus and Zebrafish tissues based on the fact that these species have 100% homology with the amino acid sequence used as antigen.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>PREDICTED MOLECULAR WEIGHT:</b>	66
<b>IMMUNOGEN:</b>	Phosphopeptide corresponding to amino acid residues surrounding the phospho-Thr210 of PLK1.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Affinity Purified
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
<b>STORAGE CONDITIONS:</b>	PLK1 antibody can be stored at -20°C and is stable at -20°C for at least 1 year.
<b>CLONALITY:</b>	Polyclonal
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	PLK, STPK13, PLK, Polo-like kinase 1, PLK-1
<b>ACCESSION NO.:</b>	P53350
<b>PROTEIN GI NO.:</b>	1709658
<b>OFFICIAL SYMBOL:</b>	PLK1
<b>GENE ID:</b>	5347

### Background

<b>BACKGROUND:</b>	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).
<b>REFERENCES:</b>	<p>1) 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.</p> <p>2) Takai N, Hamanaka R, Yoshimatsu J, Miyakawa I (2005) Polo-like kinases and cancer. Oncogene Jan 10; 24(2): 287-91.</p> <p>3) van de Weerd BC, van Vugt MA, Lindon C, Kauw JJ, Rozendaal MJ, Klomp maker R, Wolthuis RM, Medema</p>

**FOR RESEARCH USE ONLY**

December 13, 2016