Anti-Phospho-Thr<sup>210</sup> Polo-like Kinase 1

**Catalog Number:** p202-210  
**Size:** 100 µl

**Product Description:** Affinity purified rabbit polyclonal antibody

**Applications:** WB: 1:1000

**Antigen:** Phosphopeptide corresponding to amino acid residues surrounding the phospho-Thr<sup>210</sup> of PLK1.

**Species reactivity:** 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.

**Biological Significance:** 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 Weerdt et al., 2005).

**Western blot** of rat synaptic membrane showing specific immunolabeling of the ~66 k PLK protein phosphorylated at Thr<sup>210</sup> (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-Thr<sup>210</sup> PLK antibody. The immunolabeling is completely eliminated by treatment with λ-Ptase.
**Purification Method:** 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 Thr\(^{210}\). Immunolabeling of the PLK band is completely blocked by λ-phosphatase treatment.

**Quality Control Tests:** Western blots performed on each lot.

**Product Specific References:**

**General References:**