



Anti-Phospho-Ser^{482,486,490} PLKK

CATALOG NO.: XPS-1022

FORM: Affinity Purified

BACKGROUND:

Considerable evidence indicates that a Polo-Like Kinase (PLK) plays an important role in cell cycle regulation. PLK is also required for bipolar spindle formation, activation of the anaphase-promoting complex/cyclosome, and cytokinesis. Recent work led to the identification of a PLKK that is thought to be responsible for activation of PLK. Recent work (Erikson, *et al.*, 2004) has shown that PLKK is in turn activated by phosphorylation at three sites (Ser⁴⁸², Ser⁴⁸⁶ and Ser⁴⁹⁰). Thus activation of PLK is thought to involve a kinase cascade involving the phosphorylation of Ser^{482,486,490} in PLKK.

SOURCE:

Rabbit anti-PLKK (Ser482/486/490) polyclonal antibody was raised against a synthetic phosphopeptide corresponding to amino acids residues surrounding the *Xenopus* Phospho-Ser^{482,486,490} PLKK. The antigen sequence used is closely homologous to rodent and human forms of PLKK. Rabbit anti-PLKK (Ser482/486/490) was purified by sequential chromatography on phospho- and non-phospho-peptide affinity columns.

APPLICATION:

This polyclonal antibody is specific for PLKK phosphorylated at Ser^{482,486,490}. Applications include Dot Blots (DB) and Western Blots (WB). Suitability for Immunohistochemistry (IHC) has not yet been determined. *Xenopus* is the only species tested to date. When internally tested under ideal conditions the working dilutions were 1:1000 for DB and WB. **This product is for research use only.**

STORAGE:

It is supplied as affinity purified polyclonal antibody, 100 µl in 150 mM NaCl, 10 mM HEPES, 100 µg per ml BSA and 50% glycerol, pH 7.5., and there is adequate amount of material to conduct 10-mini Western Blots. For long term storage -80°C is recommended, but shorter term storage at -20°C is also acceptable as aliquots may be taken without freeze/thawing due to the presence of 50% glycerol. Stock solutions are stable for a minimum of 1 year at -20°C.

REFERENCES:

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2. Erikson, E., Haystead, T.A.J., Qian, Y-W., and Maller, J.L., "A Feedback Loop in the Polo-like Kinase Activation Pathway," *J. Biol. Chem.*, **279** (2004) 32,219-32,224.
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