

## Active Recombinant Human Polo-like Kinase 1 (Drosophila)

Cat. No. PLK1-189H Lot. No. (See product label)

### SPECIFICATION

**Species**

Human

**Source**

Insect Cells

**Description**

The human polo-like kinase (PLK) gene encodes a 603- amino acid polypeptide. By Northern blot analysis, they showed PLK1 was not expressed in any adult human tissues except placenta. PLK1 localizes to the mitotic spindle, suggesting that it is involved in regulating mitotic spindle function. It has been observed that PLK1 transcripts are present at high levels in tumors of various origins and may be involved in the promotion or progression of cancers. It has been proposed as a diagnostic marker for several tumors. Data supports the notion that disruption of PLK1 function could be an important application in cancer therapy. The PLK1 was expressed in Baculovirus system and purified by an affinity column in combination with FPLC chromatography. The purified recombinant protein is greater than 95% homogeneous and contains no detectable protease, DNase and RNase activity. MW = 66 kDa.

**Form**

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

**Purity**

> 95% by SDS-PAGE.

**Activity**


1ug of PLK1 is sufficient to phosphorylate 1 ug of heat-inactivated nuclear or cytoplasmic extract at 30°C for 30 min.

**Usage**

For in vitro use only.

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**Storage** Quality guaranteed for 12 months store at -80°C. Avoid freeze / thaw cycles.

## GENE INFORMATION

**Gene Name** [PLK1 polo-like kinase 1 \(Drosophila\) \[ Homo sapiens \]](#)

**Synonyms** PLK1; polo-like kinase 1 (Drosophila); PLK; STPK13; polo-like kinase 1; polo like kinase; polo (Drosophila)-like kinase; cell cycle regulated protein kinase; EC 2.7.11.21; PLK-1; Polo-like kinase 1; Serine/threonine-protein kinase 13; polo like kinase; polo-like kinase 1 (Drosophila); Serine/threonine-protein kinase PLK1

**Gene ID** [5347](#)

**mRNA Refseq** [NM\\_005030](#)

**Protein Refseq** [NP\\_005021](#)

**MIM** [602098](#)

**UniProt ID** [P53350](#)

**Chromosome Location** 16p

**Pathway** Cell cycle; Progesterone-mediated oocyte maturation

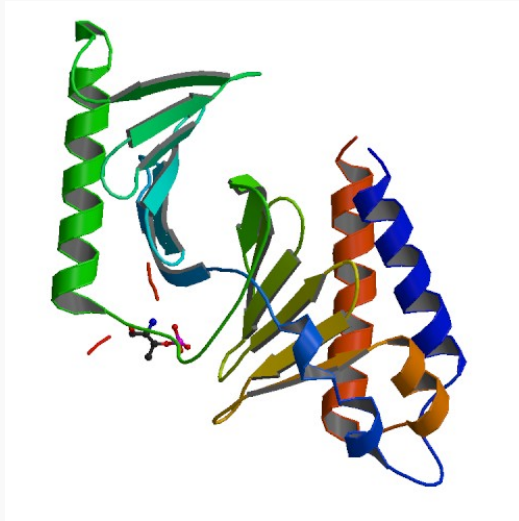
**Function** ATP binding; nucleotide binding; polo kinase kinase activity; protein binding; protein serine/threonine kinase activity; transferase activity

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