

Resource Summary Report

Generated by [NIF](#) on Sep 19, 2026

pRcCMV myc-Plk1 wt (Nigg RG6)

RRID:Addgene_41160

Type: Plasmid

Proper Citation

RRID:Addgene_41160

Plasmid Information

URL: <http://www.addgene.org/41160>

Proper Citation: RRID:Addgene_41160

Insert Name: Plk1

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:7962193](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5527; Vector Backbone:pRc/CMV; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: cDNA fragments spanning parts of the catalytic domains of human protein kinases were amplified by PCR, as described by Schultz and Nigg (1993). A 144 bp fragment (named HsPK28) showing 88% nucleotide identity to Drosophila polo was used to probe a λ gt 10 library prepared from a human nasopharyngeal carcinoma (Hitt et al., 1989). Approximately 500,000 plaques were screened by plaque hybridization (Sambrook et al., 1989), and 17 phage showing strong hybridization were purified. DNA was prepared using Lambdasorb (Promega Biotech, Madison, WI). One plasmid (referred to as Plk1-pGEM) with a 2143 bp insert contained the entire coding sequence for a protein kinase closely related to Drosophila polo. This insert was sequenced on both strands by the method of Chen and Seeburg (1985), using the Sequenase kit (United States Biochemicals). To express a full-length Plk1 protein, the 1998 bp fragment of Plk1-pGEM was introduced into the pRc/CMV vector (Invitrogen Corporation, San Diego), to create Plk1-CMV. An N-terminally myc-tagged Plk1-CMV was also constructed. In the resulting mycplk1 protein, the N terminus of Plk1 is extended by the oligopeptide MEQKLISEEDLN MNSCSPGS (Evan et al., 1985).

Plasmid Name: pRcCMV myc-Plk1 wt (Nigg RG6)

Record Creation Time: 20220422T222213+0000

Record Last Update: 20260919T091813+0000

Ratings and Alerts

No rating or validation information has been found for pRcCMV myc-Plk1 wt (Nigg RG6).

No alerts have been found for pRcCMV myc-Plk1 wt (Nigg RG6).

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 5 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Jaiswal MA, et al. (2025) 14-3-3 γ inhibits premature centriole disengagement by inhibiting the activity of Plk1 and separase. Journal of cell science, 138(14).

Yang S, et al. (2022) Spatiotemporal expression of regulatory kinases directs the transition from mitosis to cellular morphogenesis in Drosophila. Nature communications, 13(1), 772.

Takeda Y, et al. (2020) The centriole protein CEP76 negatively regulates PLK1 activity in the cytoplasm for proper mitotic progression. Journal of cell science, 133(19).

Zhao XZ, et al. (2019) Development of Highly Selective 1,2,3-Triazole-containing Peptidic Polo-like Kinase 1 Polo-box Domain-binding Inhibitors. Molecules (Basel, Switzerland), 24(8).

Ruf S, et al. (2017) PLK1 (polo like kinase 1) inhibits MTOR complex 1 and promotes autophagy. Autophagy, 13(3), 486.