

Datasheet for ABIN969580  
**anti-PLK1 antibody (AA 331-508)**[Go to Product page](#)

3 Images

2 Publications

## Overview

Quantity:	0.1 mg
Target:	PLK1
Binding Specificity:	AA 331-508
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PLK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunocytochemistry (ICC)

## Product Details

Immunogen:	Purified recombinant fragment of human PLK1 (AA: 331-508) expressed in E. coli.
Clone:	1D1
Isotype:	IgG1
Purification:	purified

## Target Details

Target:	PLK1
Alternative Name:	PLK1 ( <a href="#">PLK1 Products</a> )
Background:	Description: PLK1 is critical for the initiation of centrosome maturation. Polo-like kinases (PLKs) are a family of four serine/threonine protein kinases that are critical regulators of cell cycle

## Target Details

progression, mitosis, cytokinesis, and the DNA damage response. PLK1, -2 and -3 are ubiquitously expressed, whereas PLK4 is restricted to a few tissues including the testes and the thymus. The mRNA and protein expression of PLK1, -2 and -4 are coordinately regulated during cell cycle progression, but PLK3 levels are independent of the other three family members. Furthermore, PLK3 is a much more stable protein than PLK1, -2 or -4. PLK1 is the most well characterized member of this family and strongly promotes the progression of cells through mitosis. During the various stages of mitosis PLK1 localizes to the centrosomes, kinetochores and central spindle. PLKs are dysregulated in a variety of human cancers. PLK1 overexpression correlates with cellular proliferation and poor prognosis. PLK2 and PLK3 are involved in checkpoint-mediated cell cycle arrest to ensure genetic stability. Loss-of-function mutations in these enzymes can lead to oncogenic transformation.

Aliases: PLK, STPK13

Molecular Weight:	68 kDa
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Gene ID:	5347
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HGNC:	5347
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Pathways:	<a href="#">Cell Division Cycle, M Phase</a>
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## Application Details

Application Notes:	ELISA: 1:10000, WB: 1:500 - 1:2000, ICC: 1:50
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Restrictions:	For Research Use only
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## Handling

Format:	Liquid
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Buffer:	Purified antibody in PBS with 0.05 % sodium azide
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Preservative:	Sodium azide
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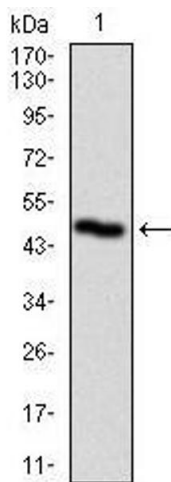
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Storage:	4 °C/-20 °C
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Storage Comment:	4°C, -20°C for long term storage
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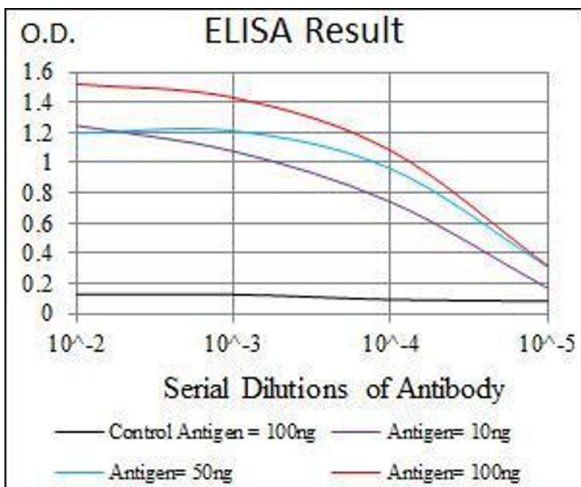
Product cited in: Li, Xia, Huang, Chen, Su, Li, Wang, Ding, Shao: "A strategy to rapidly identify the functional targets of microRNAs by combining bioinformatics and mRNA cytoplasmic/nucleic ratios in culture cells." in: **FEBS letters**, Vol. 584, Issue 14, pp. 3198-202, (2010) ([PubMed](#)).

Images



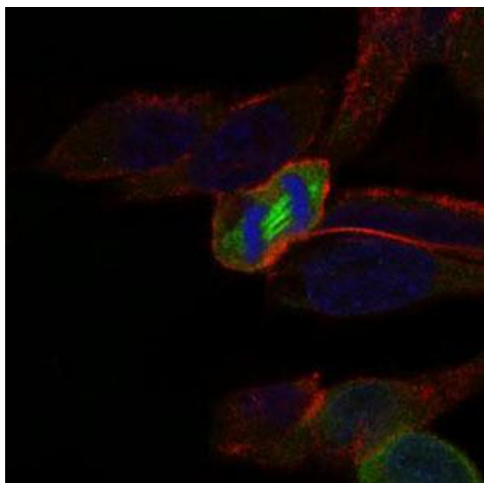
Western Blotting

**Image 1.** Western blot analysis using PLK1 mAb against human PLK1 recombinant protein. (Expected MW is 45.7 kDa)



ELISA

**Image 2.** Black line: Control Antigen (100 ng), Purple line: Antigen(10 ng), Blue line: Antigen (50 ng), Red line: Antigen (100 ng),



Immunofluorescence

**Image 3.** Immunofluorescence analysis of HeLa cells using PLK1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.