

## **Human PLK3 Antibody**

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF4197

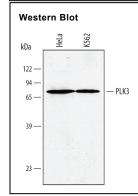
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human PLK3 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant human PLK3 Pro320-Ala520 Accession # Q9H4B4.2
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

## DATA



Detection of Human PLK3 by Western Blot. Western blot shows nuclear extracts of HeLa human cervical epithelial carcinoma cell line and K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 1 µg/mL of Human PLK3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4197) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for PLK3 at approximately 72 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE			
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.		
	*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.		

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

Polo-like kinases are critical regulators of cell cycle progression, cytokinesis, mitosis, and the genotoxic stress response. Four distinct members have been identified to date in mammalian cells: PLK1, PLK2, PLK3, and PLK4. PLK3 (polo-like kinase 3) plays an important role in cell cycle regulation by modulating microtubule dynamics and centrosomal function. Although protein levels are unchanged throughout the cell cycle, kinase activity peaks during late S and G2 phases. Many key cell cycle regulators are phosphorylated by PLK3 including p53 on Ser20, Cdc25C on Ser216, and the major subunit of DNA polymerase δ, p125 on Ser60.

Rev. 2/6/2018 Page 1 of 1

