

# PRODUCT DATA SHEET

Bioworld Biotech Co., Ltd

# PLK3 polyclonal antibody

Catalog: BS62471 Host: Rabbit Reactivity: Human, Rat, Mouse

## **BackGround:**

At least 4 distinct polo-like kinases exist in mammalian cells: PLK1, PLK2, PLK3 and PLK4/SAK. Like the other PLK family members, PLK3 contains an amino-terminal catalytic domain and a conserved carboxy-terminal domain termed the Polo box. PLK3, also called proliferation-related kinase (Prk), was originally described as a fibroblast growth factor (FGF)-inducible kinase (Fnk) and identified as an immediate-early response gene responsive to FGF-1 and other mitogens. PLK3 is a cytokine-inducible serine/threonine kinase whose protein expression is cell cycle regulated. Though its expression is found primarily in G1 phase of the cell cycle, PLK3 is detected in G0 and in late telophase prior to cytokinesis. Like the other PLK family members, PLK3 functions mainly as a regulator of the cell cycle. Specifically, PLK3 is required for entry into S phase and is a critical regulator of G1 events, as indicated by RNAi-induced PLK3-depleted cells. PLK3 is also involved in the regulation of DNA damage response via phosphorylation of p53 on Ser20. PLK3 may act as a tumor suppressor as Plk3-deficient mice develop spontaneous tumors in various organs. Unlike PLK1, PLK3 expression is down regulated in cancers including lung, head and neck, and colon.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.4.

# **Molecular Weight:**

~ 72 kDa

# **Swiss-Prot:**

Q9H4B4

## **Purification&Purity:**

The protein was purified from E.coli and the purity is > 95% (by SDS-PAGE).

# **Applications:**

WB:1:500~1:1000 IHC:1:50~1:200

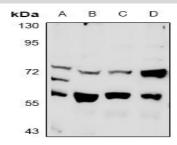
# Storage&Stability:

Store at 4  ${\mathbb C}$  short term. Aliquot and store at -25  ${\mathbb C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

PLK3 polyclonal antibody detects endogenous levels of PLK3 protein.

## **DATA:**



Western blot (WB) analysis of PLK3 polyclonal antibody at 1:500 dilution

LaneA:PC12 whole cell lysate

LaneB:CT-26 whole cell lysate

LaneC:A549 whole cell lysate

LaneD:H1792 whole cell lysate

#### Note:

For research use only, not for use in diagnostic procedure.

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