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Datasheet for ABIN7169162
anti-PLK3 antibody (AA 487-646)

3 Images

Overview

Quantity:	100 µL
Target:	PLK3
Binding Specificity:	AA 487-646
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PLK3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant Human Serine/threonine-protein kinase PLK3 protein (487-646AA)
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Purification:	Antigen Affinity Purified

Target Details

Target:	PLK3
Alternative Name:	PLK3 (PLK3 Products)
Background:	Background: Serine/threonine-protein kinase involved in cell cycle regulation, response to stress and Golgi disassembly. Polo-like kinases act by binding and phosphorylating proteins are that

Target Details

already phosphorylated on a specific motif recognized by the POLO box domains.

Phosphorylates ATF2, BCL2L1, CDC25A, CDC25C, CHEK2, HIF1A, JUN, p53/TP53, p73/TP73, PTEN, TOP2A and VRK1. Involved in cell cycle regulation: required for entry into S phase and cytokinesis. Phosphorylates BCL2L1, leading to regulate the G2 checkpoint and progression to cytokinesis during mitosis. Plays a key role in response to stress: rapidly activated upon stress stimulation, such as ionizing radiation, reactive oxygen species (ROS), hyperosmotic stress, UV irradiation and hypoxia. Involved in DNA damage response and G1/S transition checkpoint by phosphorylating CDC25A, p53/TP53 and p73/TP73. Phosphorylates p53/TP53 in response to reactive oxygen species (ROS), thereby promoting p53/TP53-mediated apoptosis.

Phosphorylates CHEK2 in response to DNA damage, promoting the G2/M transition checkpoint. Phosphorylates the transcription factor p73/TP73 in response to DNA damage, leading to inhibit p73/TP73-mediated transcriptional activation and pro-apoptotic functions. Phosphorylates HIF1A and JUN in response to hypoxia. Phosphorylates ATF2 following hyperosmotic stress in corneal epithelium. Also involved in Golgi disassembly during the cell cycle: part of a MEK1/MAP2K1-dependent pathway that induces Golgi fragmentation during mitosis by mediating phosphorylation of VRK1. May participate in endomitotic cell cycle, a form of mitosis in which both karyokinesis and cytokinesis are interrupted and is a hallmark of megakaryocyte differentiation, via its interaction with CIB1.

Aliases: CNK antibody, Cytokine Inducible Kinase antibody, Cytokine-inducible serine/threonine-protein kinase antibody, FGF inducible kinase antibody, FGF-inducible kinase antibody, FNK antibody, PLK-3 antibody, Plk3 antibody, PLK3_HUMAN antibody, Polo Like Kinase 3 antibody, Polo-like kinase 3 antibody, PRK antibody, Proliferation Related Kinase antibody, Proliferation-related kinase antibody, Serine/threonine-protein kinase PLK3 antibody

UniProt: [Q9H4B4](#)

Pathways: [Regulation of long-term Neuronal Synaptic Plasticity](#)

Application Details

Application Notes: Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200,

Restrictions: For Research Use only

Handling

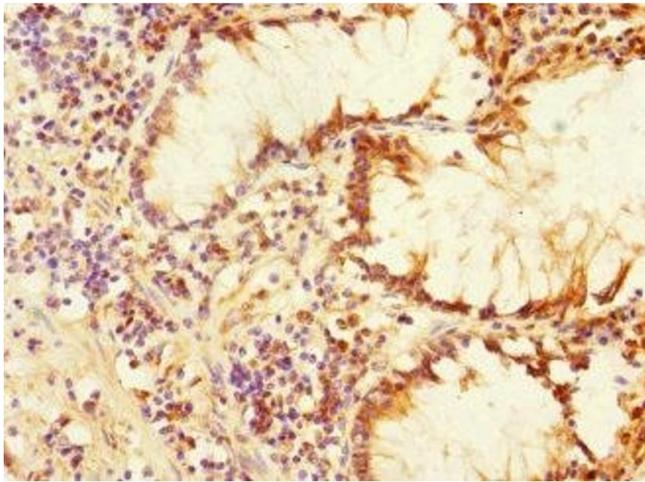
Format: Liquid

Buffer: PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.

Handling

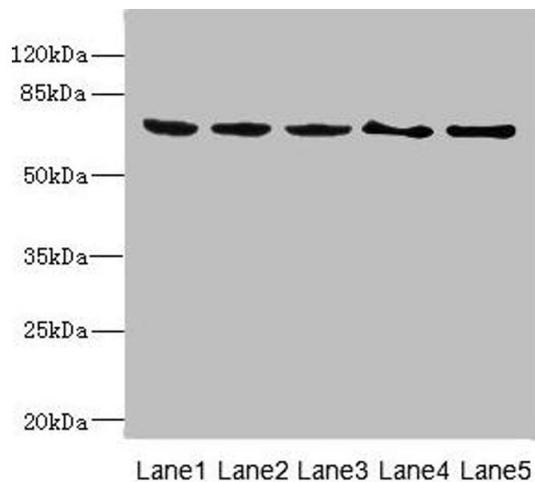
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



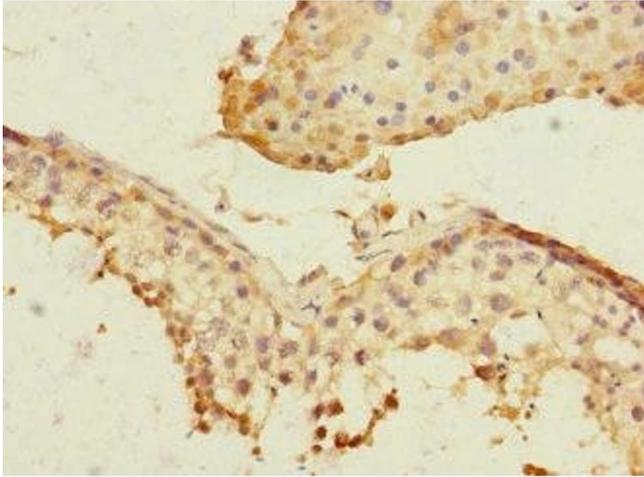
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human colon cancer using ABIN7169162 at dilution of 1:100



Western Blotting

Image 2. Western blot All lanes: PLK3 antibody at 1.2 µg/mL
Lane 1: Rat heart tissue Lane 2: Hela whole cell lysate Lane 3: 293T whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: Monocytic leukemia cells in mice Macrophages
Secondary Goat polyclonal to rabbit IgG at 1/10000 dilution
Predicted band size: 72 kDa Observed band size: 72 kDa



Immunohistochemistry

Image 3. Immunohistochemistry of paraffin-embedded human testis tissue using ABIN7169162 at dilution of 1:100