

DATASHEET

PLK-1 Rabbit Monoclonal Antibody(ARA922)

CAT. NO. ARA6757

KEY FEATURES

Target	PLK-1	Source / Host	Rabbit
Reactivity	Human	Clonality	Monoclonal
Applications	IHC	Storage	-20°C

BACKGROUND

Serine/threonine-protein kinase that performs several important functions throughout M phase of the cell cycle, including the regulation of centrosome maturation and spindle assembly, the removal of cohesins from chromosome arms, the inactivation of anaphase-promoting complex/cyclosome (APC/C) inhibitors, and the regulation of mitotic exit and cytokinesis. Polo-like kinase proteins acts by binding and phosphorylating proteins are that already phosphorylated on a specific motif recognized by the POLO box domains. Plays a key role in centrosome functions and the assembly of bipolar spindles by phosphorylating KIZ, NEDD1 and NINL. NEDD1 phosphorylation promotes subsequent targeting of the gamma-tubulin ring complex (gTuRC) to the centrosome, an important step for spindle formation. Phosphorylation of NINL component of the centrosome leads to NINL dissociation from other centrosomal proteins. Involved in mitosis exit and cytokinesis by phosphorylating CEP55, ECT2, KIF20A/MKLP2, CENPU, PRC1 and RACGAP1. Recruited at the central spindle by phosphorylating and docking PRC1 and KIF20A/MKLP2; creates its own docking sites on PRC1 and KIF20A/MKLP2 by mediating phosphorylation of sites subsequently recognized by the POLO box domains. Phosphorylates RACGAP1, thereby creating a docking site for the Rho GTP exchange factor ECT2 that is essential for the cleavage furrow formation. Promotes the central spindle recruitment of ECT2. Plays a central role in G2/M transition of mitotic cell cycle by phosphorylating CCNB1, CDC25C, FOXM1, CENPU, PKMYT1/MYT1, PPP1R12A/MYPT1 and WEE1.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

IHC	1:100-1:200
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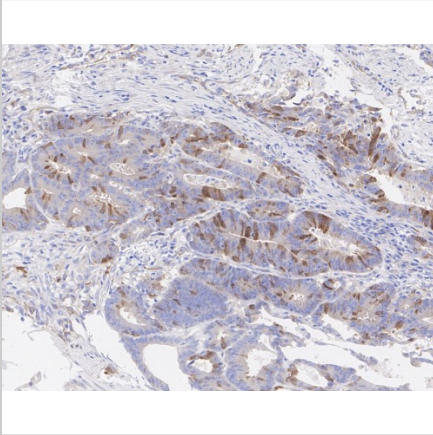
*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Antibody Type	Recombinant Rabbit monoclonal Antibody
Immunogen	Recombinant protein within human PLK1 aa 314 - 603 / 603
Molecular Weight	Predicted band size: 68 kDa
Positive Control	HeLa cell lysate, K-562 cell lysate, HEK-293 cell lysate, Raji cell lysate, HT-29 cell lysate, HCT 116 cell lysate, COS-1 cell lysate, RAW264.7 cell lysate, C6 cell lysate, mouse testis tissue lysate, rat testis tissue lysate, HeLa, RAW264.7, PC-12, human colon cancer tissue, mouse colon tissue, rat colon tissue
Conjugation	unconjugated
Form/Buffer	PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide
Isotype	IgG
Purification	Protein A affinity purified

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET**PLK-1 Rabbit Monoclonal Antibody(ARA922)****CAT. NO. ARA6757****DATA**

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue with PLK-1 Rabbit Monoclonal Antibody(ARA922).

STORAGE

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.

More information: www.arexbio.com