

ARG40139 anti-PLK4 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PLK4
Tested Reactivity	Hu
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PLK4
Species	Human
Immunogen	KLH-conjugated synthetic peptide between aa. 724-758 of Human PLK4.
Conjugation	Un-conjugated
Alternate Names	SAK; PLK-4; STK18; Serine/threonine-protein kinase PLK4; Serine/threonine-protein kinase Sak; EC 2.7.11.21; Serine/threonine-protein kinase 18; MCCRP2; Polo-like kinase 4

Application Instructions

Application table	Application	Dilution
	WB	1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	T47D	

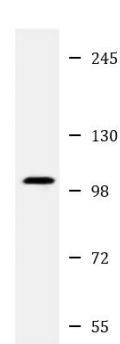
Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PLK4
Gene Full Name	polo-like kinase 4
Background	This gene encodes a member of the polo family of serine/threonine protein kinases. The protein localizes to centrioles, complex microtubule-based structures found in centrosomes, and regulates centriole duplication during the cell cycle. Three alternatively spliced transcript variants that encode different protein isoforms have been found for this gene. [provided by RefSeq, Jun 2010]
Function	Serine/threonine-protein kinase that plays a central role in centriole duplication. Able to trigger procentriole formation on the surface of the parental centriole cylinder, leading to the recruitment of centriole biogenesis proteins such as SASS6, CENPJ/CPAP, CCP110, CEP135 and gamma-tubulin. When overexpressed, it is able to induce centrosome amplification through the simultaneous generation of multiple procentrioles adjoining each parental centriole during S phase. Phosphorylates 'Ser-151' of FBXW5 during the G1/S transition, leading to inhibit FBXW5 ability to ubiquitinate SASS6. Its central role in centriole replication suggests a possible role in tumorigenesis, centrosome aberrations being frequently observed in tumors. Also involved in deuterosome-mediated centriole amplification in multiciliated that can generate more than 100 centrioles. Also involved in trophoblast differentiation by phosphorylating HAND1, leading to disrupt the interaction between HAND1 and MDFIC and activate HAND1. Phosphorylates CDC25C and CHEK2. [UniProt]
Calculated Mw	109 kDa
PTM	Ubiquitinated; leading to its degradation by the proteasome. Tyrosine-phosphorylated by TEC. [UniProt]
Cellular Localization	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Nucleus, nucleolus. Cleavage furrow. Note=Component of the deuterosome, a structure that promotes de novo centriole amplification in multiciliated cells that can generate more than 100 centrioles. Associates with centrioles throughout the cell cycle. According to PubMed:16244668, it is not present at cleavage furrows. [UniProt]

Images



T47D

ARG40139 anti-PLK4 antibody WB image

Western blot: 20 µg of T47D whole cell lysate stained with ARG40139 anti-PLK4 antibody at 1:2000 dilution.