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Anti-PLK2 Antibody

Rabbit polyclonal antibody to PLK2
Catalog # AP60997

Product Information

Application	WB
Primary Accession	Q9NYY3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	78237

Additional Information

Gene ID	10769
Other Names	SNK; Serine/threonine-protein kinase PLK2; Polo-like kinase 2; PLK-2; hPlk2; Serine/threonine-protein kinase SNK; hSNK; Serum-inducible kinase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PLK2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

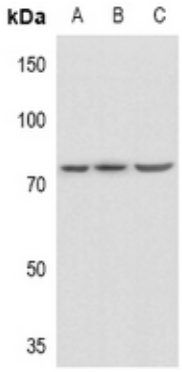
Name	PLK2
Synonyms	SNK
Function	Tumor suppressor serine/threonine-protein kinase involved in synaptic plasticity, centriole duplication and G1/S phase transition. Polo-like kinases act by binding and phosphorylating proteins that are already phosphorylated on a specific motif recognized by the POLO box domains. Phosphorylates CPAP, NPM1, RAPGEF2, RASGRF1, SNCA, SIPA1L1 and SYNGAP1. Plays a key role in synaptic plasticity and memory by regulating the Ras and Rap protein signaling: required for overactivity-dependent spine remodeling by phosphorylating the Ras activator RASGRF1 and the Rap inhibitor SIPA1L1 leading to their degradation by the proteasome. Conversely, phosphorylates the Rap activator RAPGEF2 and the Ras inhibitor SYNGAP1, promoting their activity. Also regulates synaptic plasticity independently of kinase activity, via its interaction with NSF that disrupts the interaction between NSF and the

	GRIA2 subunit of AMPARs, leading to a rapid rundown of AMPAR-mediated current that occludes long term depression. Required for procentriole formation and centriole duplication by phosphorylating CPAP and NPM1, respectively. Its induction by p53/TP53 suggests that it may participate in the mitotic checkpoint following stress.
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Cell projection, dendrite Note=Localizes to centrosomes during early G1 phase where it only associates to the mother centriole and then distributes equally to both mother and daughter centrioles at the onset of S phase
Tissue Location	Expressed at higher level in the fetal lung, kidney, spleen and heart.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PLK2. The exact sequence is proprietary.

Images



Western blot analysis of PLK2 expression in A549 (A), HEK293T (B), LO2 (C) whole cell lysates.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.