PLK2 Antibody

Catalog No: #35022

Package Size: #35022-1 50ul #35022-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	
Product Name	PLK2 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific
	immunogen.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total PLK2 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human PLK2.
Target Name	PLK2
Other Names	EC 2.7.11.21; Polo-like kinase 1; PLK-2; Serine/threonine-protein kinase SNK; Serum-inducible kinase
Accession No.	Swiss-Prot: Q9NYY3NCBI Gene ID: 10769
Uniprot	Q9NYY3
GenelD	10769;
SDS-PAGE MW	78kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide
	and 50% glycerol.
Storage	Store at -20°C

## Application Details

Western blotting: 1:500~1:3000

## Images



Western blot analysis of extracts from HeLa cells and MCF-7 cells, using PLK2 antibody #35022.

## Background

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 are that already phosphorylated on a specific motif recognized by the POLO box domains. Phosphorylates CENPJ, 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 CENPJ and NPM1, respectively. Its induction by p53/TP53 suggests that it may participate in the mitotic checkpoint following stress.

Ouyang B., Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases.

Anderson K.M., Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.

Fidler C., Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.

Note: This product is for in vitro research use only