

**Anti-PLK2 Picoband Antibody**  
**Catalog # ABO10264****Specification****Anti-PLK2 Picoband Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q9NYY3</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for PLK2 detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PLK2 Picoband Antibody - Additional Information**

**Gene ID** 10769

**Other Names**

Serine/threonine-protein kinase PLK2, 2.7.11.21, Polo-like kinase 2, PLK-2, hPlk2, Serine/threonine-protein kinase SNK, hSNK, Serum-inducible kinase, PLK2, SNK

**Application Details**

Western blot, 0.1-0.5 µg/ml<br> Direct ELISA, 0.1-0.5 µg/ml<br>

**Subcellular Localization**

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole.

**Tissue Specificity**

Expressed at higher level in the fetal lung, kidney, spleen and heart.

**Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E. coli-derived human PLK2 recombinant protein (Position: A94-Q188).

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C; for one year. After r° Constitution, at 4°C; for one month. It° Can also be aliquotted and stored frozen at -20°C; for a longer time. Avoid repeated freezing and**

thawing.

## Anti-PLK2 Picoband Antibody - 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.

## Anti-PLK2 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-PLK2 Picoband Antibody - Images

## Anti-PLK2 Picoband Antibody - Background

Polo-like kinase2, also known as SNK is an enzyme that in humans is encoded by the PLK2 gene. PLK2 is a member of the 'polo' family of serine/threonine protein kinases that have a role in normal cell division. The International Radiation Hybrid Mapping Consortium mapped the SNK gene to chromosome 5. SNK involved in synaptic plasticity, centriole duplication and G1/S phase transition. This gene 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.