

## Rabbit PLK2 Polyclonal Antibody | anti-PLK2 antibody

PLK2 Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                 |
|-----------|--------|-------------------|--------------------------------------------------------------|
| AAA325120 | Rabbit | Human, Mouse, Rat | ELISA, Immunocytochemistry, Immunofluorescence, Western Blot |

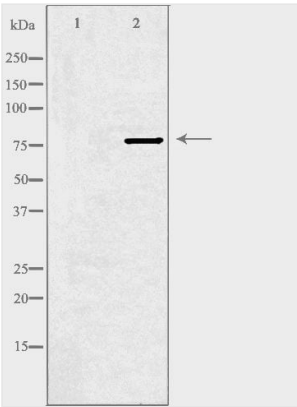
### PRODUCT SYNONYMS

PLK2; Polyclonal Antibody; PLK2 Antibody; hPlk2; hSNK; PLK-2; Plk2; PLK2\_HUMAN; Polo like kinase 2; Polo-like kinase 2; Serine/threonine protein kinase PLK2; Serine/threonine protein kinase SNK; Serine/threonine-protein kinase PLK2; Serine/threonine-protein kinase SNK; Serum Induced Kinase; Serum-inducible kinase; SNK; anti-PLK2 antibody

### PRODUCT SPECIFICATIONS

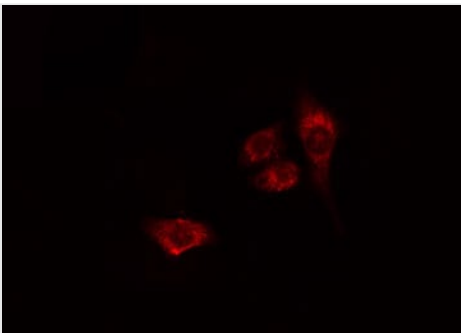
|                                                |                                                                                                                 |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                          |
| Reactivity                                     | Human, Mouse, Rat                                                                                               |
| Clonality                                      | Polyclonal                                                                                                      |
| Isotype                                        | IgG                                                                                                             |
| Specificity                                    | PLK2 antibody detects endogenous levels of total PLK2                                                           |
| Purity/Purification                            | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.                   |
| Form/Format                                    | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                   |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                          |
| Sequence Length                                | 671                                                                                                             |
| Applicable Applications for anti-PLK2 antibody | ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)                                    |
| Immunogen                                      | A synthesized peptide                                                                                           |
| Subcellular Location                           | Cytoskeleton                                                                                                    |
| Tissue Specificity                             | Expressed at higher level in the fetal lung, kidney, spleen and heart.                                          |
| Predicted Cross Reactivity                     | <b>Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus</b>                                                 |
| Similarity                                     | Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (92%) |
| Conjugation                                    | Unconjugated                                                                                                    |
| Preparation and Storage                        | Store at -20 degree C. Stable for 12 months from date of receipt.                                               |

IMAGES



WB (Western Blot)

Western blot analysis of extracts from HeLa cells using PLK2 antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA325120 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-PLK2 antibody

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 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.

Subunit Structure: Interacts with NSF; causing NSF dissociation from GRIA2. Interacts with CIB1 (By similarity).

Post-translational Modifications: Catalytic activity is enhanced by phosphorylation of Thr-239.

Similarity: The POLO box domains act as phosphopeptide-binding module that recognize and bind serine-[phosphothreonine/phosphoserine]-(proline/X) motifs. PLK2 recognizes and binds docking proteins that are already phosphorylated on these motifs, and then phosphorylates them (By similarity). Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CDC5/Polo subfamily.

NCBI AND UNIPROT INFORMATION

|                                  |                                                |
|----------------------------------|------------------------------------------------|
| NCBI GI #                        | 356582335                                      |
| NCBI GeneID                      | 10769                                          |
| NCBI Accession #                 | NP_001239155.1                                 |
| NCBI GenBank Nucleotide #        | NM_001252226.1                                 |
| UniProt Accession #              | Q9NYY3; O60679; Q96CV7; Q9UE61                 |
| Molecular Weight                 | Observed: 78 kD<br>Predicted: 79 kDa           |
| NCBI Official Full Name          | serine/threonine-protein kinase PLK2 isoform 2 |
| NCBI Official Synonym Full Names | polo like kinase 2                             |
| NCBI Official Symbol             | PLK2                                           |
| NCBI Official Synonym Symbols    | SNK; hSNK; hPlk2                               |
| NCBI Protein Information         | serine/threonine-protein kinase PLK2           |

|                            |                                      |
|----------------------------|--------------------------------------|
| UniProt Protein Name       | Serine/threonine-protein kinase PLK2 |
| UniProt Gene Name          | <b>PLK2</b>                          |
| UniProt Synonym Gene Names | SNK; PLK-2; hPlk2; hSNK              |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/plk2-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/325120>