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SNK / PLK2 Antibody (aa291-340)

Rabbit Polyclonal Antibody
Catalog # ALS16685

Specification

SNK / PLK2 Antibody (aa291-340) - Product Information

Application	**IHC, WB**
Primary Accession	Q9NYY3
Other Accession	10769
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**78237**

SNK / PLK2 Antibody (aa291-340) - Additional Information

Gene ID 10769

Other Names
PLK2, HPlk2, HSNK, MSNK, PLK-2, Polo-like kinase 2, SNK, Serum inducible kinase snk, Serum-inducible kinase

Target/Specificity
PLK2 Antibody detects endogenous levels of total PLK2 protein.

Reconstitution & Storage
PBS (without Mg2+, Ca2+), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C for up to one year.

Precautions
SNK / PLK2 Antibody (aa291-340) is for research use only and not for use in diagnostic or therapeutic procedures.

SNK / PLK2 Antibody (aa291-340) - 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 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.

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.

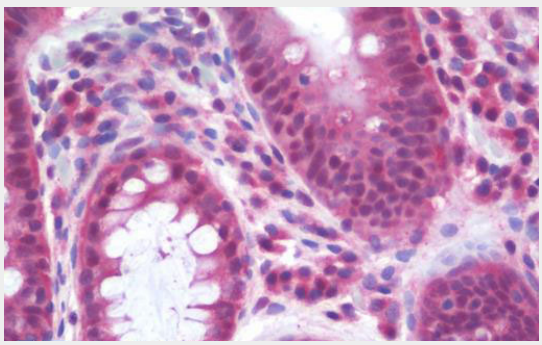
Volume
50 µl

SNK / PLK2 Antibody (aa291-340) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SNK / PLK2 Antibody (aa291-340) - Images



Anti-SNK / PLK2 antibody IHC staining of human colon.

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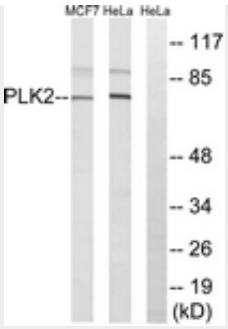

Western blot of extracts from HeLa/MCF-7 cells, using PLK2 Antibody.

SNK / PLK2 Antibody (aa291-340) - 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.

SNK / PLK2 Antibody (aa291-340) - References

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