



Rabbit Anti-PLK4/STK18 antibody

SL22112R

Product Name:	PLK4/STK18
Chinese Name:	丝氨酸/苏氨酸蛋白激酶18
Alias:	PLK 4; PLK-4; PLK4_HUMAN; Polo like Kinase 4; Polo-like kinase 4; Protein serine/threonine kinase; SAK; Serine/Threonine Kinase 18; Serine/threonine kinase; Serine/threonine protein kinase 18; Serine/threonine protein kinase PLK4; Serine/threonine protein kinase Sak; Serine/threonine-protein kinase 18; Serine/threonine-protein kinase PLK4; Serine/threonine-protein kinase SAK; Snk Akin Kinase; STK 18.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Rabbit,Sheep,
Applications:	IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	108kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PLK4/STK18:881-970/970
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Serine/threonine-protein kinase that plays a central role in centriole duplication. Able to trigger procentriole formation on the surface of the parental centriole cylinder, leading to the recruitment of centriole biogenesis proteins such as SASS6, CENPJ/CPAP, CP110,

CEP135 and gamma-tubulin. When overexpressed, it is able to induce centrosome amplification through the simultaneous generation of multiple procentrioles adjoining each parental centriole during S phase. Its central role in centriole replication suggests a possible role in tumorigenesis, centrosome aberrations being frequently observed in tumors. Also involved in trophoblast differentiation by phosphorylating HAND1, leading to disrupt the interaction between HAND1 and MDFIC and activate HAND1. Phosphorylates CDC25C and CHEK2/CHK2.

Function:

Serine/threonine-protein kinase that plays a central role in centriole duplication. Able to trigger procentriole formation on the surface of the parental centriole cylinder, leading to the recruitment of centriole biogenesis proteins such as SASS6, CENPJ/CPAP, CP110, CEP135 and gamma-tubulin. When overexpressed, it is able to induce centrosome amplification through the simultaneous generation of multiple procentrioles adjoining each parental centriole during S phase. Its central role in centriole replication suggests a possible role in tumorigenesis, centrosome aberrations being frequently observed in tumors. Also involved in trophoblast differentiation by phosphorylating HAND1, leading to disrupt the interaction between HAND1 and MDFIC and activate HAND1. Phosphorylates CDC25C and CHEK2.

Subunit:

Homodimer. Interacts with CEP152 (via N-terminus).

Subcellular Location:

Cytoplasm, cytoskeleton, centrosome, centriole. Nucleus, nucleolus.

Post-translational modifications:

Ubiquitinated; leading to its degradation by the proteasome.
Tyrosine-phosphorylated by TEC.

Similarity:

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CDC5/Polo subfamily.

SWISS:

O00444

Gene ID:

10733

Database links:

[Entrez Gene: 10733](#)Human

[Entrez Gene: 20873](#)Mouse

[Entrez Gene: 310344](#)Rat

[SwissProt: O00444](#)Human

[SwissProt: Q64702](#)Mouse

[SwissProt: B2GUY1](#)Rat

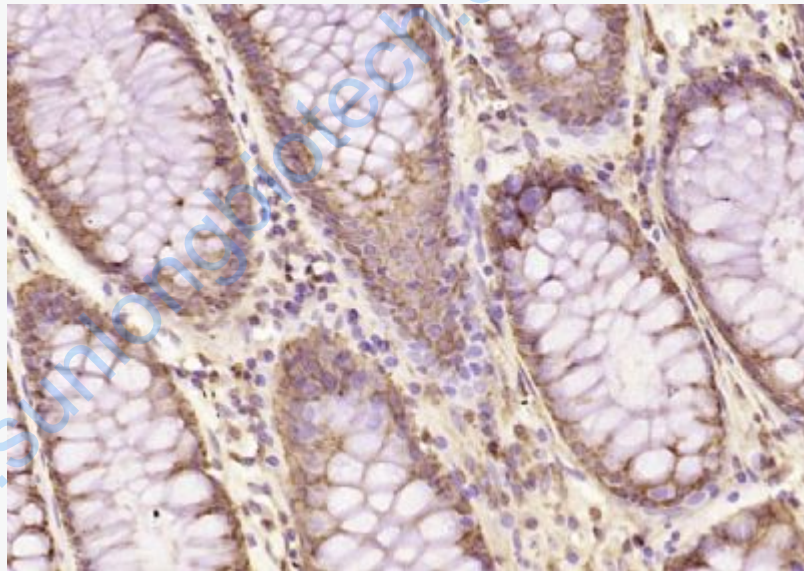
[Unigene: 172052](#)Human

[Unigene: 3794](#)Mouse

[Unigene: 14848](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PLK4 STK18) Polyclonal Antibody, Unconjugated (SL22112R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

