

## Rabbit anti-Human PLK4 Polyclonal Antibody | anti-PLK4 antibody

Anti-PLK4 Antibody, Rabbit Polyclonal

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                                                |
|-----------|--------|------------|-----------------------------------------------------------------------------|
| AAA254420 | Rabbit | Human      | Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot |

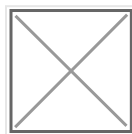
### PRODUCT SYNONYMS

PLK4; Polyclonal Antibody; Anti-PLK4 Antibody; Rabbit Polyclonal; PLK4 Antibody; Rabbit PAb; Antigen Affinity Purified; polo like kinase 4; Anti-MCCRP2 Antibody; Anti-SAK Antibody; Anti-STK18 Antibody; anti-PLK4 antibody

### PRODUCT SPECIFICATIONS

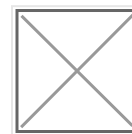
|                                                |                                                                                                                                                                                                                                                                       |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                                                                |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                 |
| Clonality                                      | Polyclonal                                                                                                                                                                                                                                                            |
| Isotype                                        | Rabbit IgG                                                                                                                                                                                                                                                            |
| Specificity                                    | Human PLK4                                                                                                                                                                                                                                                            |
| Purity/Purification                            | Protein A & Antigen Affinity                                                                                                                                                                                                                                          |
| Form/Format                                    | Liquid; 0.2um filtered solution in PBS                                                                                                                                                                                                                                |
| Applicable Applications for anti-PLK4 antibody | IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                                     |
| Immunogen                                      | A synthetic peptide corresponding to the N-terminus of the Human PLK4                                                                                                                                                                                                 |
| Conjugation                                    | Unconjugated                                                                                                                                                                                                                                                          |
| Preparation                                    | Produced in rabbits immunized with a synthetic peptide corresponding to the N-terminus of the Human PLK4, and purified by antigen affinity chromatography.                                                                                                            |
| Preparation and Storage                        | This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. |

### IMAGES



#### WB (Western Blot)

Anti-PLK4 rabbit polyclonal antibody at 1:500 dilution Lane A: HeLa Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 109 kDa Observed band size: 109 kDa (We are unsure as to the identity of these extra bands).



#### IHC (Immunohistochemistry)

Immunochemical staining of human PLK4 in human stomach with rabbit polyclonal antibody at 1:10000 dilution, formalin-fixed paraffin embedded sections.



#### IF (Immunofluorescence)

Immunofluorescence staining of PLK4 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-human PLK4 polyclonal antibody (1:5000) at 4 degree C overnight. Then cells were stained with the Alexa Fluor594-conjugated Goat Anti-rabbit IgG secondary antibody (red) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.

### ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-PLK4 antibody | Polo like kinase-4 (PLK4) is one such kinase that appears in low abundance and plays a well-characterized role in centriole duplication. Polo-like kinases (PLK) are eukaryotic regulators of cell cycle progression, mitosis and cytokinesis; PLK4 is a master regulator of centriole duplication. The localization of PLK4 on centrioles must be precisely regulated during mitosis to ensure correct centriole duplication. PLK4 deregulation (i.e. both overexpression and depletion of PLK4), leads to altered mitotic fidelity and thereby triggers tumorigenesis. PLK4 is the major kinase driving centriole duplication. Duplication occurs only once per cell cycle, forming one new (or daughter) centriole that is tightly engaged to the preexisting (or mother) centriole. |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 299829210                                                                                                                                                                                              |
| NCBI GeneID                      | 10733                                                                                                                                                                                                  |
| NCBI Accession #                 | NP_001177728.1                                                                                                                                                                                         |
| NCBI GenBank Nucleotide #        | NM_001190799.1                                                                                                                                                                                         |
| UniProt Accession #              | O00444; Q8IYF0; Q96Q95; Q9UD84; Q9UDE2; B2RAL0; B7Z837; B7Z8G7                                                                                                                                         |
| Molecular Weight                 | 108,972 Da                                                                                                                                                                                             |
| NCBI Official Full Name          | serine/threonine-protein kinase PLK4 isoform 2                                                                                                                                                         |
| NCBI Official Synonym Full Names | polo-like kinase 4                                                                                                                                                                                     |
| NCBI Official Symbol             | PLK4                                                                                                                                                                                                   |
| NCBI Official Synonym Symbols    | SAK; STK18                                                                                                                                                                                             |
| NCBI Protein Information         | serine/threonine-protein kinase PLK4; PLK-4; Snk akin kinase; serine/threonine kinase 18; serine/threonine-protein kinase 18; serine/threonine protein kinase SAK; serine/threonine-protein kinase Sak |
| UniProt Protein Name             | Serine/threonine-protein kinase PLK4                                                                                                                                                                   |
| UniProt Gene Name                | PLK4                                                                                                                                                                                                   |
| UniProt Synonym Gene Names       | SAK; STK18; PLK-4                                                                                                                                                                                      |
| UniProt Entry Name               | PLK4_HUMAN                                                                                                                                                                                             |

**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.