

Rabbit PLK1 / PLK-1 Polyclonal Antibody | anti-PLK1 antibody

Rabbit Polyclonal to Human PLK1 / PLK-1

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA52108	Rabbit	Bovine, Dog, Human, Macaque, Monkey, Mouse, Pig, Rat	Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

PLK1 / PLK-1; Polyclonal Antibody; Rabbit Polyclonal to Human PLK1 / PLK-1; Anti-PLK1 / PLK-1 Antibody (aa100-200) IHC-plus; PLK1; Polo like kinase; Polo-like kinase (Drosophila); Polo-like kinase 1; STPK13; Polo (Drosophila)-like kinase; PLK; PLK-1; Human PLK1; anti-PLK1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Bovine, Dog, Human, Macaque, Monkey, Mouse, Pig, Rat
Clonality	Polyclonal
Specificity	A portion of amino acids 100-200 of human PLK1 was used as the immunogen.
Purity/Purification	Antiserum
Form/Format	PBS containing 0.05% BSA and 0.05% sodium azide
Sequence Length	603
Applicable Applications for anti-PLK1 antibody	WB (Western Blot), IHC (Immunohistochemistry)
Target Species	Human
Family/Subfamily	Protein Kinase/Polo
Antigen type	Protein fragment
Immunogen	PLK1/PLK-1 antibody was raised against a portion of amino acids 100-200 of human PLK1.
Disclaimer	Due to the highly specific nature of antibodies and antigens, we cannot predict or be held responsible with respect to how this antibody will behave in your systems. Researchers using this antibody should conduct optimization studies to achieve the most optimal result possible for their intended application.

Recommended Immunohistochemistry Protocol

The following protocol is a recommendation only, and AAA Biotech makes no guarantee of the results:

Tissue Preparation:

Formalin fixation and embedding in paraffin wax.

Tissue Sectioning:

Make 4-um sections and place on pre-cleaned and charged microscope slides. Heat in a tissue-dryingoven for 45 minutes at 60°C.

Deparaffinization:

Wash dry slides in 3 changes of xylene - 5 minutes each @ RT

Rehydration:

Wash slides in 3 changes of 100% alcohol - 3 minutes each @ RT

Wash slides in 2 changes of 95% alcohol - 3 minutes each @ RT

Wash slides in 1 change of 80% alcohol - 3 minutes @ RT

Rinse slides in gentle running distilled water - 5 minutes @ RT

Antigen retrieval:

Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes

Remove from heat and let stand at room temperature in buffer - 20 minutes

Rinse in 1X TBS with Tween (TBST) -1 minute @ RT

Immunostaining:

(Do not allow tissues to dry at any time during the staining procedure)

Apply a universal protein block - 20 minutes @ RT

Drain protein block from slides, apply diluted primary antibody - 45 minutes @ RT

Rinse slides in 1 X TBST - 1 minute @ RT

Apply a biotinylated secondary antibody appropriate for the primary antibody - 30 minutes @ RT

Rinse slides in 1X TBST -1 minute @ RT

Apply alkaline phosphatase streptavidin - 30 minutes @ RT

Rinse slides in 1X TBST -1 minute @ RT

Apply alkaline phosphatase chromogen substrate - 30 minutes @ RT

Wash slides in distilled water - 1 minute @ RT

Dehydrate:

(This method should only be used if the chromogen substrate is alcohol insoluble (e.g. Vector Red, DAB)

Wash slides in 2 changes of 80% alcohol - 1 minute each @ RT

Wash slides in 2 changes of 95% alcohol - 1 minute each @ RT

Wash slides in 3 changes of 100% alcohol - 1 minute each @ RT

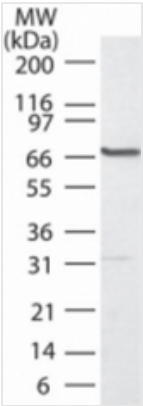
Wash slides in 3 changes of xylene - 1 minute each @ RT

Apply coverslip

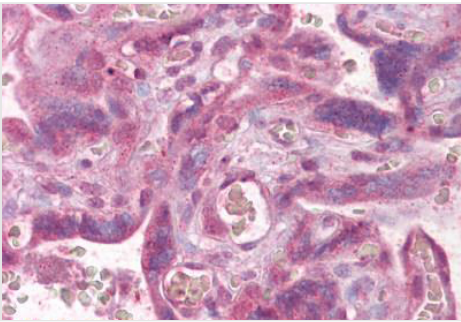
Preparation and Storage

Long term: -20 degree C; Short term: +4 degree C; Avoid freeze-thaw cycles.

IMAGES



WB (Western Blot)
Western blot of PLK1 in HCT-116 using antibody at 1:2000.



IHC (Immunohistochemistry)
Anti-PLK1 antibody IHC of human placenta. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody dilution 1:100.

ADDITIONAL INFORMATION

Related Product Information for anti-PLK1 antibody	PLK, a Polo type protein kinase, has been shown to function in mitosis. The mRNA is absent or expressed at very low levels during the G1 phase, begins to reaccumulate during the S phase, and reaches maximal levels during the G2/M phase. PLK1 may participate in targeting MPF to the nucleus during prophase and in regulating mitotic spindle function. These functions, in addition to its expression in proliferating cells, suggest that PLK1 has a role in cancer progression.
Product Categories/Family for anti-PLK1 antibody	Family: Protein Kinase; Subfamily: Polo

NCBI AND UNIPROT INFORMATION

NCBI GI #	21359873
NCBI GeneID	5347
NCBI Accession #	NP_005021.2
NCBI GenBank Nucleotide #	NM_005030.3
UniProt Accession #	P53350; Q15153; Q99746
Molecular Weight	68,255 Da
NCBI Official Full Name	serine/threonine-protein kinase PLK1
NCBI Official Synonym Full Names	polo-like kinase 1
NCBI Official Symbol	PLK1
NCBI Official Synonym Symbols	PLK; STPK13
NCBI Protein Information	serine/threonine-protein kinase PLK1; PLK-1; polo like kinase; polo (Drosophia)-like kinase; serine/threonine-protein kinase 13; cell cycle regulated protein kinase
UniProt Protein Name	Serine/threonine-protein kinase PLK1
UniProt Gene Name	PLK1
UniProt Synonym Gene Names	PLK; PLK-1; STPK13
UniProt Entry Name	PLK1_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.

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