

## **Product datasheet for TA500383S**

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OriGene Technologies, Inc.

## PLK1 Mouse Monoclonal Antibody [Clone ID: OTI3F12]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI3F12
Applications: FC, IP, WB

Recommended Dilution: WB 1:2000, IHC 1:150, FLOW 1:100, IP 2ug/500ul

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full-length protein expressed in 293T cell transfected with human PLK1 expression vector

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 1.01 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 68.1 kDa

**Gene Name:** polo like kinase 1

Database Link: NP 005021

Entrez Gene 18817 MouseEntrez Gene 25515 RatEntrez Gene 5347 Human

P53350

**Background:** Serine/threonine-protein kinase that performs several important functions throughout M

phase of the cell cycle, including the regulation of centrosome maturation and spindle assembly, the removal of cohesins from chromosome arms, the inactivation of APC/C

inhibitors, and the regulation of mitotic exit and cytokinesis

Synonyms: PLK; STPK13

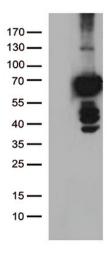
**Protein Families:** Druggable Genome, Protein Kinase



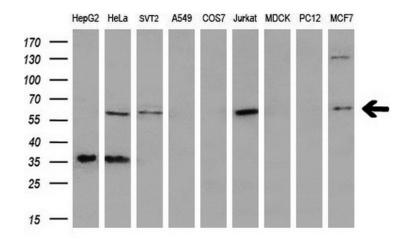


**Protein Pathways:** Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation

## **Product images:**

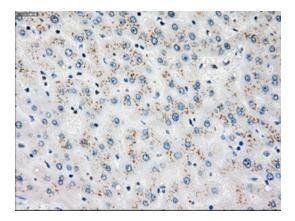


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PLK1 ([RC201795], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PLK1. (1:. Positive lysates [LY417592] (100ug) and [LC417592] (20ug) can be purchased separately from OriGene.

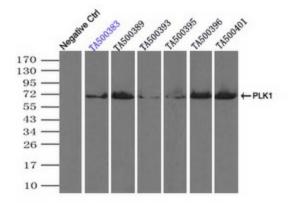


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PLK1 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).

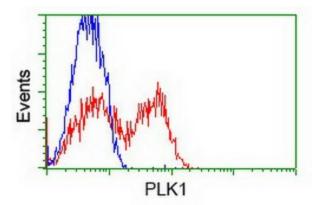




Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-PLK1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500383])



Immunoprecipitation (IP) of PLK1 by using TrueMab monoclonal anti-PLK1 antibodies (Negative control: IP without adding anti-PLK1 antibody.). For each experiment, 500ul of DDK tagged PLK1 overexpression lysates (at 1:5 dilution with HEK293T lysate), 2ug of anti-PLK1 antibody and 20ul (0.1mg) of goat anti-mouse conjugated magnetic beads were mixed and incubated overnight. After extensive wash to remove any non-specific binding, the immunoprecipitated products were analyzed with rabbit anti-DDK polyclonal antibody.



HEK293T cells transfected with either [RC201795] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PLK1 antibody ([TA500383]), and then analyzed by flow cytometry.