

Product datasheet for **TA328019**

PLK1 Mouse Monoclonal Antibody [Clone ID: 3F8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	3F8
Applications:	WB
Recommended Dilution:	WB, IP, IF
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	Amino Acid: 300-603 of human PLK-1
Formulation:	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide at 0.5 mg/ml.
Concentration:	lot specific
Purification:	The antibody was purified by affinity chromatography.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	68 kD
Gene Name:	polo like kinase 1
Database Link:	NP_005021 Entrez Gene 18817 Mouse Entrez Gene 5347 Human P53350



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Background:

PLK-1 (polo-like kinase 1) is a member of the serine/threonine protein kinase family, cdc5/polo subfamily. Highly homologous to polo-like kinase (*Drosophila*), PLK-1 contains two polo box domains with a predicted molecular weight of 68 kD. This nuclear protein is highly expressed in placenta and colon and has been shown to regulate cdc2/cyclin B through phosphorylation and activation of cdc25c phosphatase. PLK-1 may also be required for cell division; depletion of PLK-1 results in apoptosis. PLK-1 is upregulated by growth stimulating agents and is regulated by cell cycle position (highest in G2/M phase, declining to nearly undetectable levels after mitosis and throughout G1). PLK-1 is modified by phosphorylation (Thr210 is the major phosphorylation site in activated PLK-1 from mitotic cells) and has been shown to interact with nuclear distribution gene C. The 3F8 monoclonal antibody recognizes human and mouse PLK-1 and has been shown to be useful for Western blotting.

Synonyms:

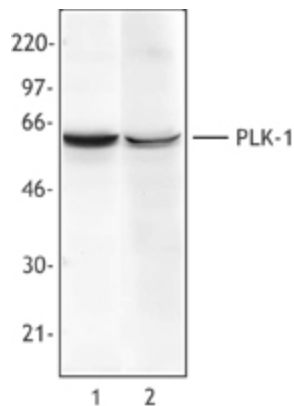
PLK; STPK13

Protein Families:

Druggable Genome, Protein Kinase

Protein Pathways:

Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation

Product images:

HeLa cell extract (Lane 1) or NIH3T3 cell extract (Lane 2) was resolved by electrophoresis, transferred to nitrocellulose and probed with monoclonal anti-Plk-1 (Clone 3F8) antibody. Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system.