



Fnk Monoclonal Antibody

Catalog No	YP-mAb-14749
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PLK3
Immunogen	The antiserum was produced against synthesized peptide derived from human PLK3. AA range:231-280
Specificity	Fnk Monoclonal Antibody detects endogenous levels of Fnk protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PLK 3;FNK;FGF-inducible kinase;EC:2.7.11.21;Cytokine-inducible serine/threonine-protein kinase;PLK3;Serine/threonine-protein kinase PLK3;CNK;PRK;Polo-like kinase 3;PLK-3;Proliferation-related kinase
Observed Band	70kD
Calculated Molecular Weight	70kD
Cell Pathway	Cytoplasm. Nucleus. Nucleus, nucleolus. Golgi apparatus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Translocates to the nucleus upon cisplatin treatment. Localizes to the Golgi apparatus during interphase. According to a report, PLK3 localizes only in the nucleolus and not in the centrosome, or in any other location in the cytoplasm (PubMed:17264206). The discrepancies in results may be explained by the PLK3 antibody specificity, by cell line-specific expression or post-translational modifications. .
Tissue Specificity	Transcripts are highly detected in placenta, lung, followed by skeletal muscle, heart, pancreas, ovaries and kidney and weakly detected in liver and brain. May have a short half-live. In cells of hematopoietic origin, strongly and exclusively detected in terminally differentiated macrophages. Transcript expression appears to be down-regulated in primary lung tumor.

**Function**

catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Serine/threonine protein kinase involved in regulating M phase functions during the cell cycle. May also be part of the signaling network controlling cellular adhesion. In vitro, is able to phosphorylate CDC25C and casein.,induction:Cytokine and cellular adhesion trigger FNK induction.,PTM:Phosphorylated as cells enter mitosis and dephosphorylated as cells exit mitosis.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CDC5/Polo subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 2 POLO box domains.,subunit:Binds to the calcium/integrin-binding protein (CIB). This interaction probably occurs via the POLO-box domain.,tissue specificity:Transcripts are highly detected in placenta, lung, followed by skeletal mu

Background

The protein encoded by this gene is a member of the highly conserved polo-like kinase family of serine/threonine kinases. Members of this family are characterized by an amino-terminal kinase domain and a carboxy-terminal bipartite polo box domain that functions as a substrate-binding motif and a cellular localization signal. Polo-like kinases are important regulators of cell cycle progression. This gene has also been implicated in stress responses and double-strand break repair. In human cell lines, this protein is reported to associate with centrosomes in a microtubule-dependent manner, and during mitosis, the protein becomes localized to the mitotic apparatus. Expression of a kinase-defective mutant results in abnormal cell morphology caused by changes in microtubule dynamics and mitotic arrest followed by apoptosis. [provided by RefSeq, Sep 2015],

matters needing attention

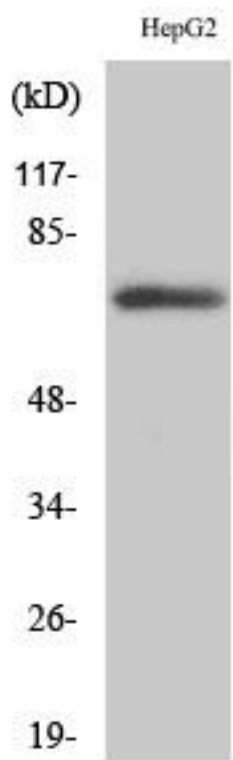
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Products Images



Western Blot analysis of various cells using Fnk Monoclonal Antibody