

Mouse p27Kip1 Antibody (C-term T197)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20325b

Product Information

Application	WB, E
Primary Accession	<u>P46414</u>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42131
Calculated MW	22193
Antigen Region	175-197

Additional Information

Gene ID	12576
Other Names	Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, Cdkn1b
Target/Specificity	This Mouse p27Kip1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 175-197 amino acids from the C-terminal region of mouse p27Kip1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse p27Kip1 Antibody (C-term T197) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Cdkn1b
Function	Important regulator of cell cycle progression (PubMed: <u>12972555</u> , PubMed: <u>8033213</u>). Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (By similarity). Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2 complexes

	(PubMed: <u>8033213</u>). Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of CCND1-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its phosphorylation state and/or stoichometry.
Cellular Location	Nucleus. Cytoplasm. Endosome. Note=Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-197, binds 14-3-3, translocates to the cytoplasm and promotes cell cycle progression. Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm and cell cycle progression Phosphorylation on Ser-10 facilitates nuclear export. Translocates to the nucleus on phosphorylation of Tyr-88 and Tyr-89 (By similarity) Colocalizes at the endosome with SNX6; this leads to lysosomal degradation (PubMed:20228253). {ECO:0000250, ECO:0000269 PubMed:20228253}

Background

Important regulator of cell cycle progression. Involved in G1 arrest. Potent inhibitor of cyclin E-and cyclin A-CDK2 complexes. Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of cyclin D-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its phosphorylation state and/or stoichometry.

Images



Anti-Mouse p27Kip1 Antibody (C-term T197) at 1:1000 dilution + C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Mouse p27Kip1 Antibody (C-term T197) (Cat. #AP20325b) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the (mouse) p27Kip1 antibody detected the (mouse) p27Kip1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.