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Anti-p27Kip1 Antibody (Monoclonal, DCS-72)

Catalog # ABO10461

Product Information

Application	WB, ICC
Primary Accession	O08769
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for p27Kip1, cyclin-dependent kinase inhibitor 1B (p27, Kip1) (CDKN1B) detection. Tested with WB, ICC in Human;mouse;rat. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Calculated MW	22139 Da
Application Details	Immunocytochemistry , 1 □g/ml, Human, mouse, rat, - Western blot, 2-4 □g/ml, Human, mouse, rat
Subcellular Localization	CDKN1B: Nucleus. Cytoplasm. Endosome Note: Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-198, binds 14-3-3, translocates tothe cytoplasm and promotes cell cycle progression. Mitogen-activated UHMK1 phosphorylation on Ser-10 also results intranslocation to the cytoplasm and cell cycle progression.Phosphorylation on Ser-10 facilitates nuclear export. Translocatesto the nucleus on phosphorylation of Tyr-88 and Tyr-89.Colocalizes at the endosome with SNX6; this leads to lysosomaldegradation (By similarity). |Cdkn1b: Nucleus. Cytoplasm. Endosome. Note: Nuclearand cytoplasmic in quiescent cells. AKT- or RSK-mediatedphosphorylation on Thr-197, binds 14-3-3, translocates to thecytoplasm and promotes cell cycle progression. Mitogen-activatedUHMK1 phosphorylation on Ser-10 also results in translocation tothe cytoplasm and cell cycle progression. Phosphorylation on Ser-10 facilitates nuclear export. Translocates to the nucleus onphosphorylation of Tyr-88 and Tyr-89 (By similarity). Colocalizesat the endosome with SNX6; this leads to lysosomal degradation.
Tissue Specificity	CDKN1B: Expressed in all tissues tested. Highestlevels in skeletal muscle, lowest in liver and kidney.
Protein Name	Cyclin-dependent kinase inhibitor 1B
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as

	preservative.
Clone Names	DCS-72
Immunogen	recombinant rodent p27Kip1 protein.
Purification	Ascites
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the CDI family.

Protein Information

Background

P27(kip1), also known as cyclin dependent kinase inhibitor 1B(CDKN1B), is a major target of AFX-like forkhead proteins. CDKN1B(p27) belongs to the Cip/Kip family and functions as an important cell cycle gatekeeper. Phosphorylation leads to the ubiquitination and degradation of CDKN1B. P27(kip1) mapped to 12p13. An increase in p27 causes proliferating cells to exit from the cell cycle, and a decrease in p27 is necessary for quiescent cells to resume division. Abnormally low amounts of p27 are associated with pathological states of excessive cell proliferation, especially cancers. Overexpression of p27Kip1 lengthens the G1 phase in a mouse model that targets inducible gene expression to central nervous system progenitor cells.