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KD-Validated Anti-Cyclin dependent kinase inhibitor 1B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2355

Product Information

Application	WB, FC, ICC
Primary Accession	P46527
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 1825
Calculated MW	22073
Gene Name	CDKN1B
Aliases	CDKN1B; Cyclin Dependent Kinase Inhibitor 1B; KIP1; P27KIP1; Cyclin-Dependent Kinase Inhibitor 1B (P27, Kip1); Cyclin-Dependent Kinase Inhibitor 1B; Cyclin-Dependent Kinase Inhibitor P27; P27Kip1; CDKN4; MEN1B; MEN4; P27
Immunogen	A synthesized peptide derived from human p27 KIP 1

Additional Information

Gene ID	1027
Other Names	Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, CDKN1B {ECO:0000303|PubMed:20824794}

Protein Information

Name	CDKN1B {ECO:0000303|PubMed:20824794}
Function	Important regulator of cell cycle progression. Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (PubMed:28666995). 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 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 stoichiometry.
Cellular Location	Nucleus. Cytoplasm. Endosome. Note=Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-198, 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. Colocalizes at the endosome with SNX6; this leads to lysosomal degradation (By similarity)
Tissue Location	Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).