

Anti-p27 Kip1 Antibody

Rabbit polyclonal antibody to p27 Kip1 Catalog # AP61460

Product Information

Application WB, IHC Primary Accession P46527

Reactivity Human, Rat, Drosophila

HostRabbitClonalityPolyclonalCalculated MW22073

Additional Information

Gene ID 1027

Other Names KIP1; Cyclin-dependent kinase inhibitor 1B; Cyclin-dependent kinase inhibitor

p27; p27Kip1

Target/Specificity Recognizes endogenous levels of p27 Kip1 protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200) IHC~~1:100~500

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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

stoichometry.

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)

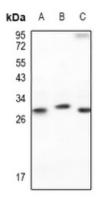
Tissue Location

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).

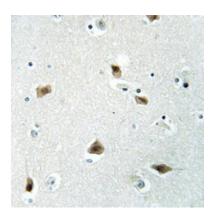
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human p27 Kip1. The exact sequence is proprietary.

Images



Western blot analysis of p27 Kip1 expression in Hela (A), HEK293T (B), C6 (C) whole cell lysates.



Immunohistochemical analysis of p27 Kip1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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