

p27 Polyclonal Antibody

Catalog # AP71685

Product Information

Application WB, IHC-P Primary Accession P46527

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW22073

Additional Information

Gene ID 1027

Other Names CDKN1B; KIP1; Cyclin-dependent kinase inhibitor 1B; Cyclin-dependent kinase

inhibitor p27; p27Kip1

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

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)

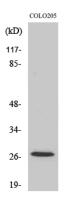
Tissue Location

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

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.

Images



Western Blot analysis of various cells using p27 Polyclonal Antibody

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