

Anti-p27 Kip1 Antibody

Rabbit polyclonal antibody to p27 Kip1 Catalog # AP61460

Specification

Anti-p27 Kip1 Antibody - Product Information

Application WB, IHC Primary Accession P46527

Reactivity Human, Rat, Dog Host Rabbit

Clonality Polyclonal Calculated MW 22073

Anti-p27 Kip1 Antibody - 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

Anti-p27 Kip1 Antibody - 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

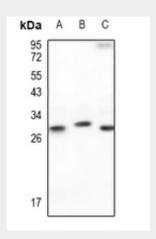
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

Anti-p27 Kip1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

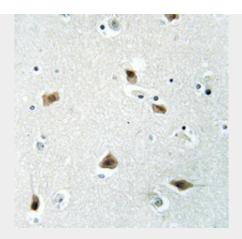
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-p27 Kip1 Antibody - 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.

Anti-p27 Kip1 Antibody - Background

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