

p27Kip1 Antibody (N-term S12)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20014a

Specification

p27Kip1 Antibody (N-term S12) - Product Information

Application	WB,E
Primary Accession	P46527
Other Accession	P46414 , Q60439 , NP_004055.1
Reactivity	Human, Mouse
Predicted	Hamster
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	22073
Antigen Region	1-30

p27Kip1 Antibody (N-term S12) - Additional Information

Gene ID 1027

Other Names

Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, CDKN1B, KIP1

Target/Specificity

This p27Kip1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human p27Kip1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

p27Kip1 Antibody (N-term S12) is for research use only and not for use in diagnostic or therapeutic procedures.

p27Kip1 Antibody (N-term S12) - 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

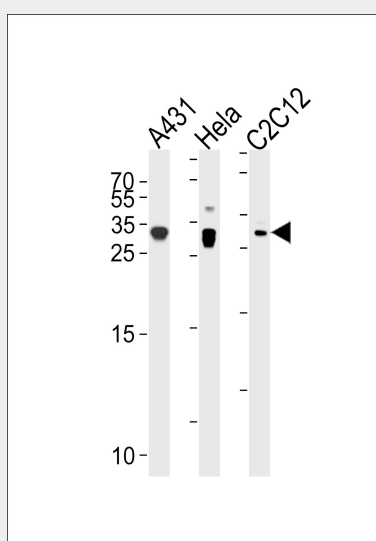
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

p27Kip1 Antibody (N-term S12) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

p27Kip1 Antibody (N-term S12) - Images



p27Kip1 Antibody (N-term S12) (Cat. #AP20014a) western blot analysis in A431, HeLa, mouse C2C12 cell line lysates (35ug/lane). This demonstrates the p27Kip1 antibody detected the p27Kip1 protein (arrow).

p27Kip1 Antibody (N-term S12) - Background

This gene encodes a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state. [provided by RefSeq].

p27Kip1 Antibody (N-term S12) - References

Kajihara, R., et al. Biochem. Biophys. Res. Commun. 401(3):350-355(2010)
Kedde, M., et al. Nat. Cell Biol. 12(10):1014-1020(2010)
Canbay, E., et al. Anticancer Res. 30(7):3093-3098(2010)
Do Nascimento Borges, B., et al. In Vivo 24(4):579-582(2010)
Qin, J., et al. Hepatogastroenterology 57 (99-100), 547-553 (2010) :

p27Kip1 Antibody (N-term S12) - Citations

- [CDK16 Phosphorylates and Degrades p53 to Promote Radioresistance and Predicts Prognosis in Lung Cancer.](#)