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27Kip1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6269B

Specification

27Kip1 Antibody (C-term) - Product Information

Application	**IF, WB,E**
Primary Accession	P46527
Other Accession	Q60439
Reactivity	**Human**
Predicted	**Hamster**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**22073**
Antigen Region	**165-194**

27Kip1 Antibody (C-term) - Additional Information

Gene ID 1027

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

Target/Specificity
This 27Kip1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 165-194 amino acids from the C-terminal region of human 27Kip1.

Dilution
IF~~1:10~50
WB~~1:1000

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
27Kip1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

27Kip1 Antibody (C-term) - 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)

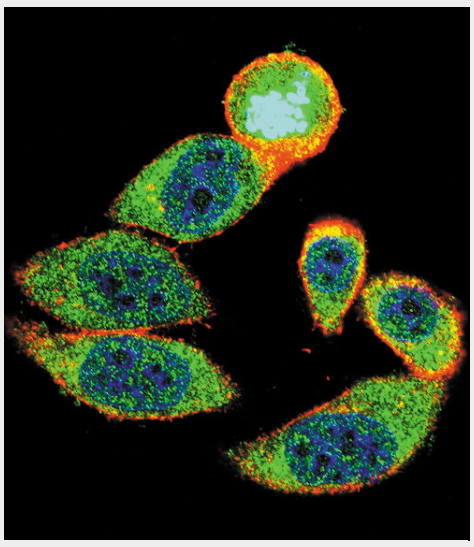
Tissue Location
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

27Kip1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

27Kip1 Antibody (C-term) - Images



Confocal immunofluorescent analysis of 27Kip1 Antibody (C-term)(Cat#AP6269b) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

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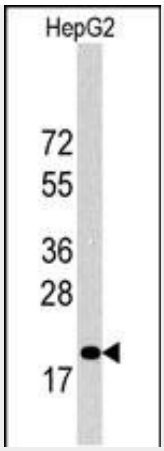

Western blot analysis of p27Kip1 Antibody (C-term)(Cat. #6269b) in HepG2 cell line lysates (35ug/lane). 27Kip1(arrow) was detected using the purified Pab.

27Kip1 Antibody (C-term) - Background

p27Kip1 is 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.

27Kip1 Antibody (C-term) - References

Kawamata, N., et al., Eur. J. Haematol. 74(5):424-429 (2005).
Andreu, E.J., et al., Cancer Res. 65(8):3264-3272 (2005).
Wingate, H., et al., J. Biol. Chem. 280(15):15148-15157 (2005).
Wang, C., et al., J. Biol. Chem. 280(13):12339-12343 (2005).
Rassidakis, G.Z., et al., Blood 105(2):827-829 (2005).