

CDKN1B / p27 Kip1 Antibody (Internal)

Goat Polyclonal Antibody Catalog # ALS13086

Specification

CDKN1B / p27 Kip1 Antibody (Internal) - Product Information

Application IHC
Primary Accession P46527
Reactivity Human
Host Goat
Clonality Polyclonal
Calculated MW 22kDa KDa

CDKN1B / p27 Kip1 Antibody (Internal) - Additional Information

Gene ID 1027

Other Names

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

Target/Specificity

Human CDKN1B / p27 Kip1.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

CDKN1B / p27 Kip1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

CDKN1B / p27 Kip1 Antibody (Internal) - 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

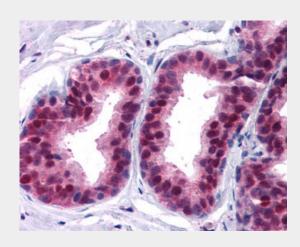
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

CDKN1B / p27 Kip1 Antibody (Internal) - Protocols

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

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

CDKN1B / p27 Kip1 Antibody (Internal) - Images



Anti-CDKN1B / p27 Kip1 antibody IHC of human prostate.

CDKN1B / p27 Kip1 Antibody (Internal) - Background

Important regulator of cell cycle progression. 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.

CDKN1B / p27 Kip1 Antibody (Internal) - References

Polyak K.,et al.Cell 78:59-66(1994).

Pietenpol J.A., et al. Cancer Res. 55:1206-1210(1995).

Kalnine N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.

Montagnoli A., et al. Genes Dev. 13:1181-1189(1999).

Ishida N., et al.J. Biol. Chem. 275:25146-25154(2000).