

CDKN1B-Y88 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20721b

Specification

CDKN1B-Y88 Antibody - Product Information

WB,E Application **Primary Accession** P46527 Other Accession 060439 Reactivity Human Predicted Hamster Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG

CDKN1B-Y88 Antibody - Additional Information

Gene ID 1027

Other Names

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

Target/Specificity

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 81-113 amino acids from human.

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

CDKN1B-Y88 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CDKN1B-Y88 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

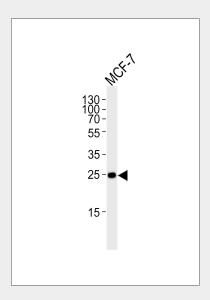
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

CDKN1B-Y88 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

CDKN1B-Y88 Antibody - Images



Western blot analysis of lysate from MCF-7 cell line, using CDKN1B-Y88 (Cat. #AP20721b). AP20721b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

CDKN1B-Y88 Antibody - 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-Y88 Antibody - 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).

CDKN1B-Y88 Antibody - Citations

• Ikaros 6 protects acute lymphoblastic leukemia cells against daunorubicin-induced apoptosis by activating the Akt-FoxO1 pathway.