

Goat Anti-KIP1 / CDKN1B (internal) Antibody

Peptide-affinity purified goat antibody Catalog # AF1591a

Specification

Goat Anti-KIP1 / CDKN1B (internal) Antibody - Product Information

Application WB, IHC Primary Accession P46527

Other Accession NP_004055, 1027

Reactivity Human

Predicted Mouse, Rat, Pig, Dog, Cow, Cat

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 22073

Goat Anti-KIP1 / CDKN1B (internal) Antibody - Additional Information

Gene ID 1027

Other Names

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

Format

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-KIP1 / CDKN1B (internal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-KIP1 / CDKN1B (internal) 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

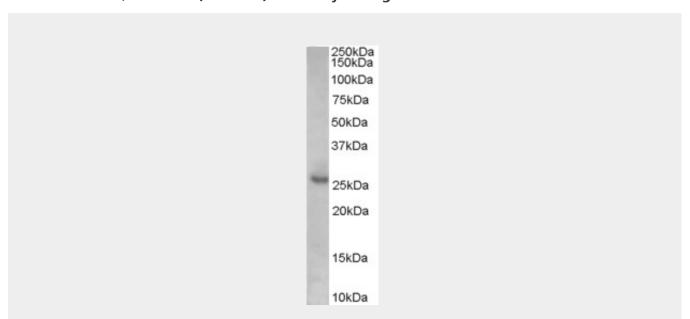
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

Goat Anti-KIP1 / CDKN1B (internal) Antibody - Protocols

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

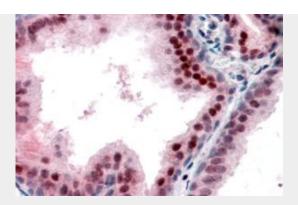
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Goat Anti-KIP1 / CDKN1B (internal) Antibody - Images



AF1591a (0.1 μ g/ml) staining of Human Prostate lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1591a (5 μ g/ml) staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-KIP1 / CDKN1B (internal) Antibody - 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.

Goat Anti-KIP1 / CDKN1B (internal) Antibody - References

JAB1 expression is associated with inverse expression of p27(kip1) in hepatocellular carcinoma. Qin J, et al. Hepatogastroenterology, 2010 May-Jun. PMID 20698225.

CCND1 and CDKN1B polymorphisms and risk of breast cancer. Canbay E, et al. Anticancer Res, 2010 Jul. PMID 20683061.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Analysis of cyclin-dependent kinase inhibitor 1B mutation in Han Chinese women with premature ovarian failure. Wang B, et al. Reprod Biomed Online, 2010 Aug. PMID 20615757.

The MENX syndrome and p27: relationships with multiple endocrine neoplasia. Molatore S, et al. Prog Brain Res, 2010. PMID 20541671.