

**Goat Anti-KIP1 / CDKN1B (internal) Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1591a****Specification**

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

Application	WB, IHC, E
Primary Accession	<a href="#">P46527</a>
Other Accession	<a href="#">NP_004055</a> , <a href="#">1027</a>
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog, 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

**Dilution**WB~~1:1000  
IHC~~1:100~500  
E~~N/A**Format**

0.5 mg IgG/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:<a href="http://www.uniprot.org/citations/28666995" target="\_blank">28666995</a>). 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).

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

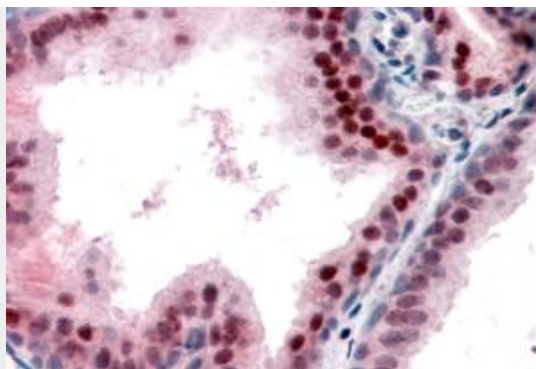
Provided below are standard protocols that you may find useful for product applications.

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

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



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



AF1591a (5 µg/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 Thiazolinedione-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.