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Anti-P27 KIP 1 Picoband Antibody

Catalog # ABO11786

Specification

Anti-P27 KIP 1 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P46527
Host	**Rabbit**
Reactivity	**Human, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Cyclin-dependent kinase inhibitor 1B(CDKN1B) detection. Tested with WB in Humnan;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-P27 KIP 1 Picoband Antibody - Additional Information

Gene ID 1027

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

Calculated MW
22073 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Rat, Human

Subcellular Localization
Nucleus. Cytoplasm. Endosome . 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 Specificity
Expressed in all tissues tested. Highest levels in skeletal muscle, lowest in liver and kidney.

Protein Name
Cyclin-dependent kinase inhibitor 1B

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human P27 KIP 1 recombinant protein (Position: S10-T198). Human P27 KIP 1 shares 87% amino acid (aa) sequence identity with mouse P27 KIP 1.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the CDI family.

Anti-P27 KIP 1 Picoband 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).

Anti-P27 KIP 1 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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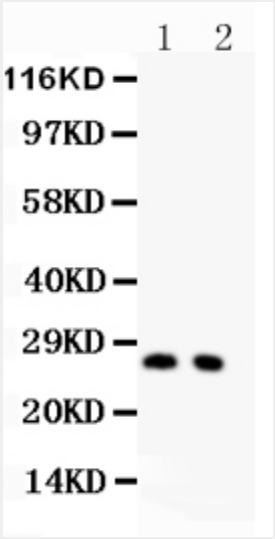
- Flow Cytomety
- Cell Culture

Anti-P27 KIP 1 Picoband Antibody - Images



Anti-P27 KIP 1 Picoband antibody, ABO11786-1.jpgAll lanes: Anti-p27 KIP 1(ABO11786) at 0.5ug/mlLane 1: Rat Thymus Tissue Lysate at 40ugLane 2: Rat Brain Tissue Lysate at 40ugPredicted bind size: 27KDObserved bind size: 27KD

Anti-P27 KIP 1 Picoband Antibody - Background

Cyclin-dependent kinase inhibitor 1B (p27KIP1), also known as KIP1 or P27, is an enzyme inhibitor that in humans is encoded by the CDKN1B gene. It encodes a protein which belongs to the Cip/Kipfamily of cyclin dependent kinase (Cdk) inhibitor proteins. It is mapped to 12p13.1. p27KIP1 can inhibit both CDK activation and the kinase activity of assembled and activated cyclin-CDK. The function of p27KIP1 is associated with an aggressive phenotype in human breast cancer. Downregulation of p27KIP1 by CK2-alpha-prime is necessary for development of agonist- and stress-induced cardiac hypertrophy.