

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 Human;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 Na₃.

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 reconstitution, 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 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).

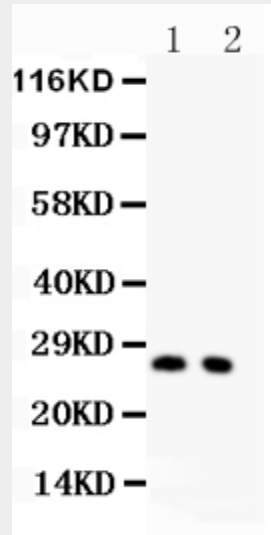
Anti-P27 KIP 1 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-P27 KIP 1 Picoband Antibody - Images



Anti-P27 KIP 1 Picoband antibody, ABO11786-1.jpg All lanes: Anti-p27 KIP 1 (ABO11786) at 0.5ug/ml
Lane 1: Rat Thymus Tissue Lysate at 40ug
Lane 2: Rat Brain Tissue Lysate at 40ug
Predicted bind size: 27KD
Observed 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/Kip family 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.