10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Cyclin dependent kinase inhibitor 1B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2355

Specification

KD-Validated Anti-Cyclin dependent kinase inhibitor 1B Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P46527
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 22 kDa ; Observed, 27 kDa KDa**
Gene Name	**CDKN1B**
Aliases	**CDKN1B; Cyclin Dependent Kinase Inhibitor 1B; KIP1; P27KIP1; Cyclin-Dependent Kinase Inhibitor 1B (P27, Kip1); Cyclin-Dependent Kinase Inhibitor 1B; Cyclin-Dependent Kinase Inhibitor P27; P27Kip1; CDKN4; MEN1B; MEN4; P27**
Immunogen	**A synthesized peptide derived from human p27 KIP 1**

KD-Validated Anti-Cyclin dependent kinase inhibitor 1B Rabbit Monoclonal Antibody - Additional Information

Gene ID	**1027**

Other Names
Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, CDKN1B {ECO:0000303|PubMed:20824794}

KD-Validated Anti-Cyclin dependent kinase inhibitor 1B Rabbit Monoclonal 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)

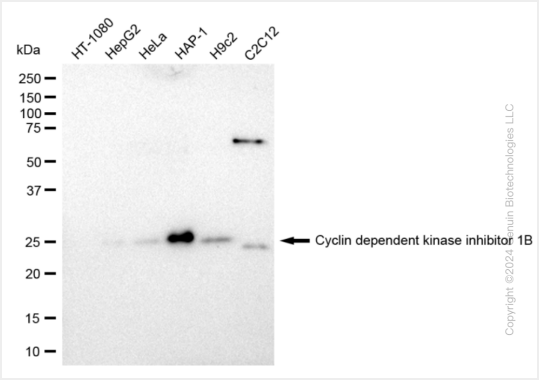
Tissue Location
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

KD-Validated Anti-Cyclin dependent kinase inhibitor 1B Rabbit Monoclonal Antibody - Protocols

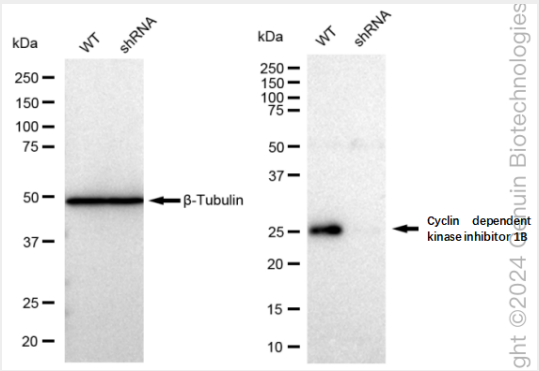
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Cyclin dependent kinase inhibitor 1B Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Cyclin dependent kinase inhibitor 1B antibody (Cat#AGI2355). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Cyclin dependent kinase inhibitor 1B antibody (Cat#AGI2355, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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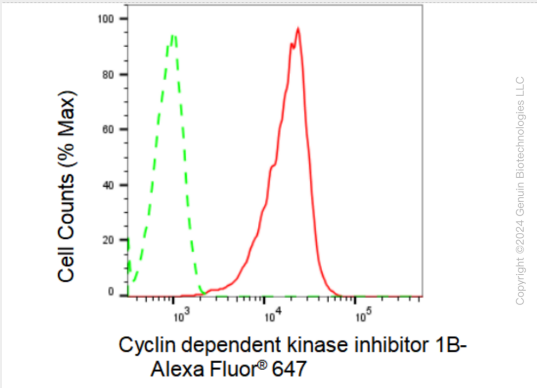
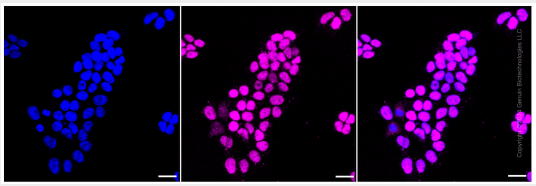
Western blotting analysis using anti-Cyclin dependent kinase inhibitor 1B antibody (Cat#AGI2355). Cyclin dependent kinase inhibitor 1B expression in wild type (WT) and cyclin dependent kinase inhibitor 1B shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Cyclin dependent kinase inhibitor 1B antibody (Cat#AGI2355, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Cyclin dependent kinase inhibitor 1B expression in HAP-1 cells using Cyclin dependent kinase inhibitor 1B antibody (Cat#AGI2355, 1:2,000). Green, isotype control; red, Cyclin dependent kinase inhibitor 1B.



Immunocytochemical staining of HAP-1 cells with Cyclin dependent kinase inhibitor 1B antibody (Cat#AGI2355, 1:1,000). Nuclei were stained blue with DAPI; Cyclin dependent kinase inhibitor 1B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.