

KD-Validated Anti-Cdk4 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI2298**Specification****KD-Validated Anti-Cdk4 Rabbit Monoclonal Antibody - Product Information**

| | |
|-------------------|---|
| Application | WB, FC, ICC |
| Primary Accession | P11802 |
| Reactivity | Rat, Human, Mouse |
| Clonality | Monoclonal |
| Isotype | Rabbit IgG |
| Calculated MW | Predicted, 34 kDa , observed, 30 kDa |
| Gene Name | CDK4 |
| Aliases | CDK4; Cyclin Dependent Kinase 4; PSK-J3; Cell Division Protein Kinase 4; Cyclin-Dependent Kinase 4; EC 2.7.11.22; EC 2.7.11; CMM3 |
| Immunogen | A synthesized peptide derived from human Cdk4 |

KD-Validated Anti-Cdk4 Rabbit Monoclonal Antibody - Additional Information

| | |
|--|------|
| Gene ID | 1019 |
| Other Names | |
| Cyclin-dependent kinase 4, 2.7.11.22, Cell division protein kinase 4, PSK-J3, CDK4 | |

KD-Validated Anti-Cdk4 Rabbit Monoclonal Antibody - Protein Information**Name** CDK4**Function**

Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.

Cellular Location

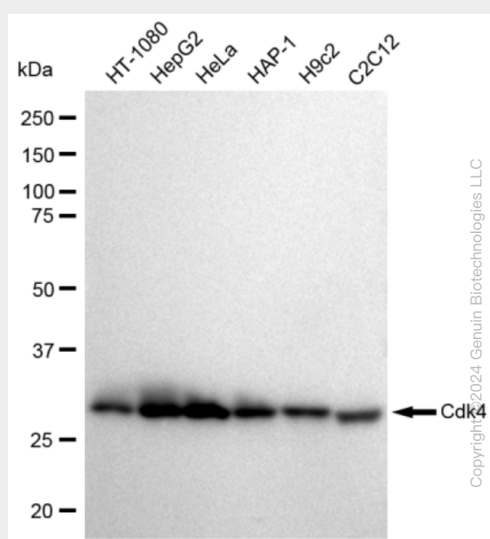
Cytoplasm. Nucleus. Nucleus membrane. Note=Cytoplasmic when non-complexed Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the nucleus on transition from G(1) to S phase. Also present in nucleoli and heterochromatin lumps. Colocalizes with RB1 after release into the nucleus.

KD-Validated Anti-Cdk4 Rabbit Monoclonal Antibody - Protocols

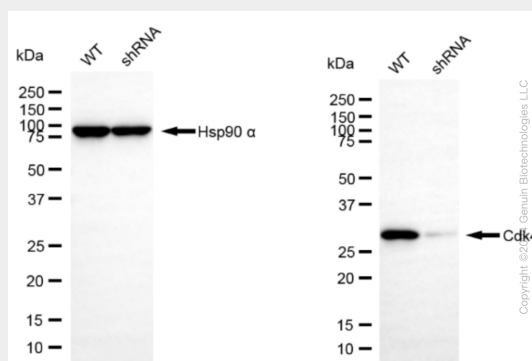
Provided below are standard protocols that you may find useful for product applications.

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

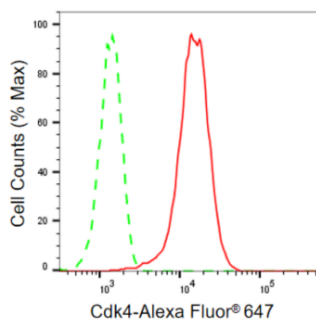
KD-Validated Anti-Cdk4 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Cdk4 antibody (Cat#AGI2298). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Cdk4 antibody (Cat#AGI2298, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.

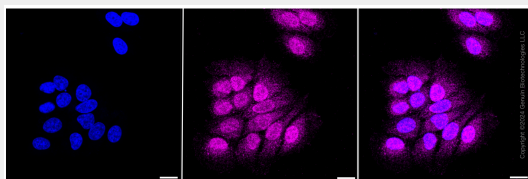


Western blotting analysis using anti-Cdk4 antibody (Cat#AGI2298). Cdk4 expression in wild type (WT) and Cdk4 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. GAPDH serves as a loading control. The blot was incubated with anti-Cdk4 antibody (Cat#AGI2298, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody respectively.



Copyright ©2024 Genun Biotechnologies LLC

Flow cytometric analysis of Cdk4 expression in HepG2 cells using Cdk4 antibody (Cat#AGI2298, 1:2,000). Green, isotype control; red, Cdk4.



Copyright ©2024 Genun Biotechnologies LLC

Immunocytochemical staining of HepG2 cells with Cdk4 antibody (Cat#AGI2298, 1:1,000). Nuclei were stained blue with DAPI; Cdk4 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.