

**Catalog #: 63162** 

### **Aliases**

CDK2; Cyclin Dependent Kinase 2; Cell Division Protein Kinase 2; Cyclin-Dependent Kinase 2; P33 Protein Kinase; EC 2.7.11.22; CDKN2; Cdc2-Related Protein Kinase; P33(CDK2); EC 2.7.11

### **Background**

Gene Name: CDK2 NCBI Gene Entry: 1017 UniProt Entry: P24941

## **Application Information**

Molecular Weight: Predicted, 34 kDa, observed, 34 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 24GB4315

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC),

immunohistochemistry (IHC)

### **Immunogen**

A synthesized peptide derived from human Cdk2

### **Isotype**

Rabbit IgG

## **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

## **Storage**

Store at -20 °C for one year.

### **Recommended Dilutions**

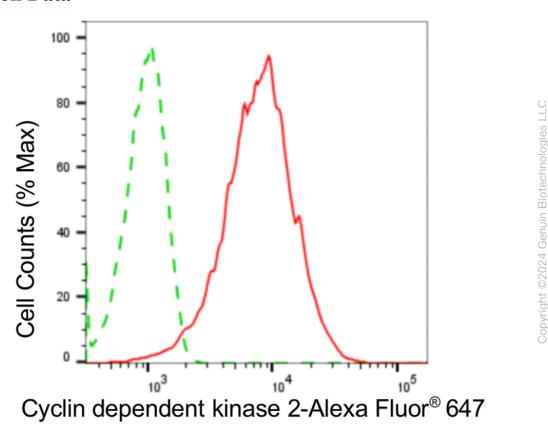
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

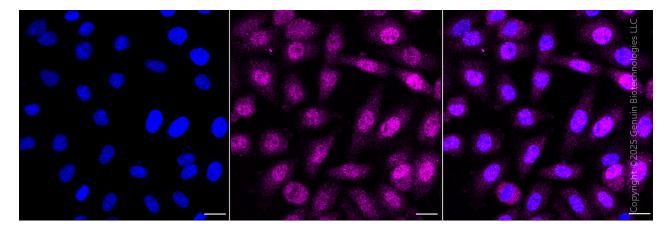
Immunocytochemistry (IC): 1:100-1:1,000 Immunohistochemistry (IHC): 1:100-1:200

**Note:** This product is for research use only.

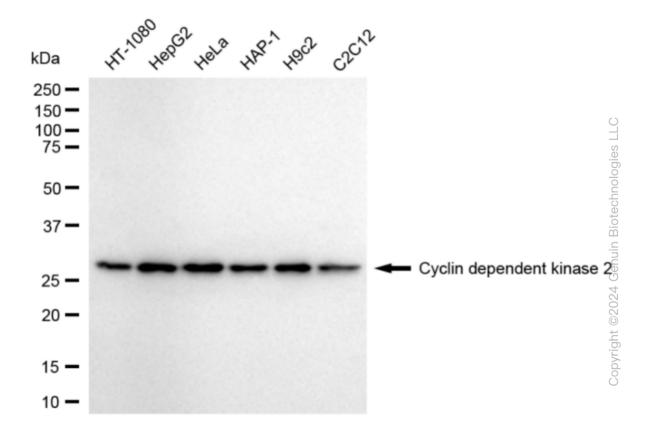
### **Validation Data**



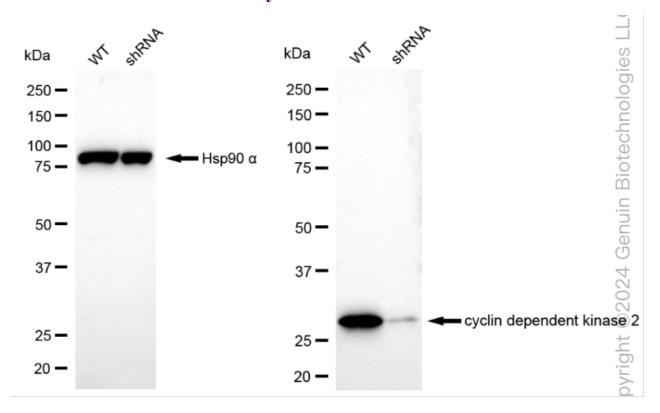
Flow cytometric analysis of cyclin dependent kinase 2 expression in HepG2 cells using anti-cyclin dependent kinase 2 antibody (Cat#63162, 1:2,000). Green, isotype control; red, cyclin dependent kinase 2.



Immunocytochemical staining of HepG2 cells with anti-Cyclin dependent kinase 2 antibody(Cat#63162, 1:1,000) . Nuclei were stained blue with DAPI; Cyclin dependent kinase 2 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  $\mu$ m.

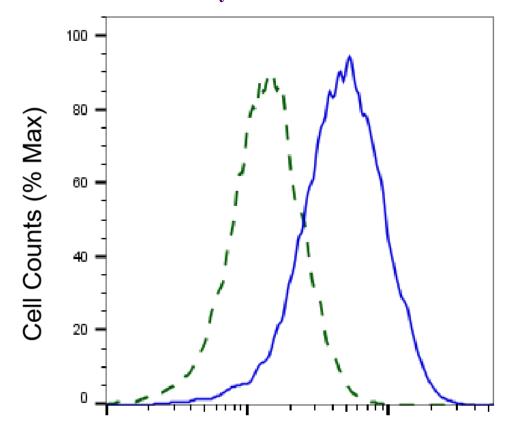


Western blotting analysis using anti-cyclin dependent kinase 2 antibody (Cat#63162). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-cyclin dependent kinase 2 antibody (Cat#63162, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).



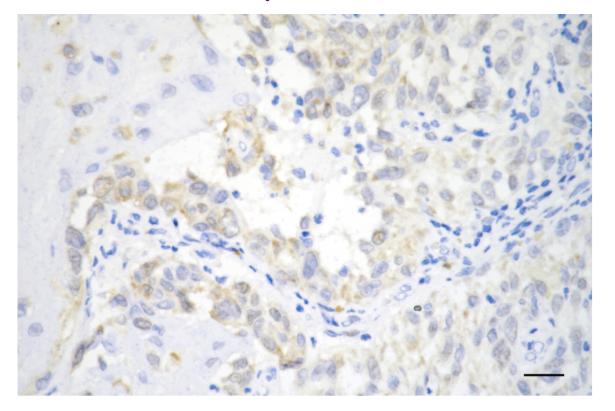
Western blotting analysis using anti-cyclin dependent kinase 2 antibody (Cat#63162). Cyclin dependent kinase 2 expression in wild type (WT) and cyclin dependent kinase 2 (CDK2) shRNA knockdown (KD) HeLa cells with 20 μg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-cyclin dependent kinase 2 antibody (Cat#63162, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ<sup>TM</sup> ECL Substrate Kit (Cat#716).





## Cyclin dependent kinase 2-Alexa Fluor® 647

Validation of Cyclin dependent kinase 2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-Cyclin dependent kinase 2 antibody (Cat#63162, 1:2,000) and analyzed using BD flow cytometer.



Immunohistochemistry was performed on paraffin-embedded human melanoma using anti-cyclin dependent kinase 2 antibody (Cat#63162, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope ( $40\times$  objective). Scale bar: 25 µm.