

## [KD Validated] Anti-CCNA2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

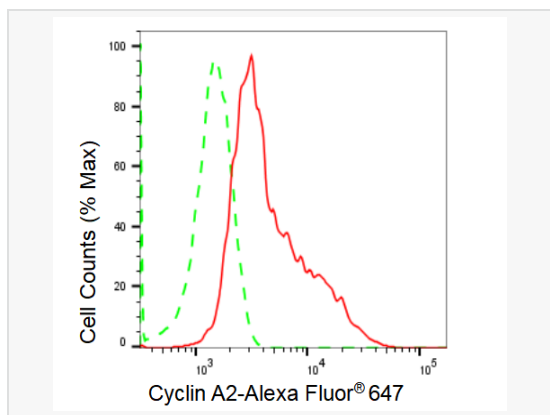
Catalog # R020334

### Product Information

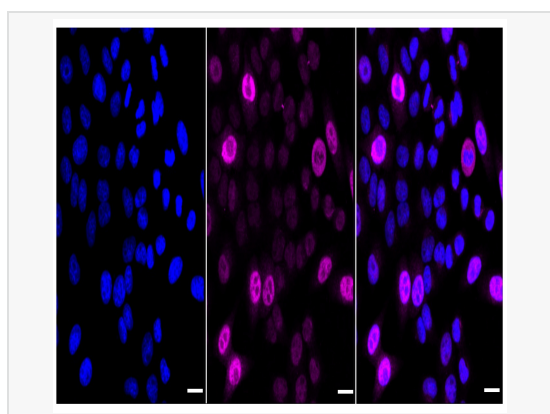
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	47C94Q74
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Cyclin A2
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-CCNA2 Rabbit mAb [47C94Q74] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

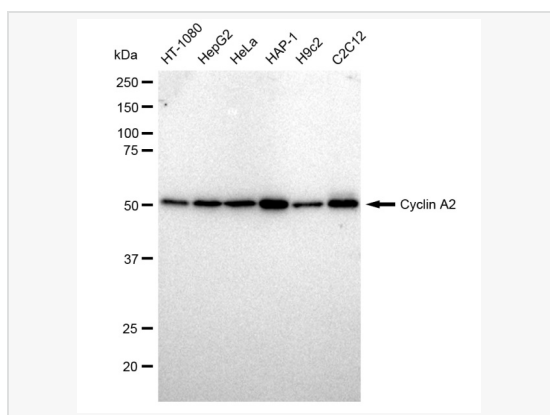
Synonyms	CCNA2; Cyclin A2; CCN1; CCNA; Cyclin-A2; Cyclin-A; Cyclin A.
Calculated MW	Calculated MW: 49 kDa, Observed MW: 50 kDa
Uniprot ID	P20248
Gene ID	890
Background	The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. In contrast to cyclin A1, which is present only in germ cells, this cyclin is expressed in all tissues. This cyclin binds and activates CDC2 or CDK2 kinases, and thus promotes both cell cycle G1/S and G2/M transitions.



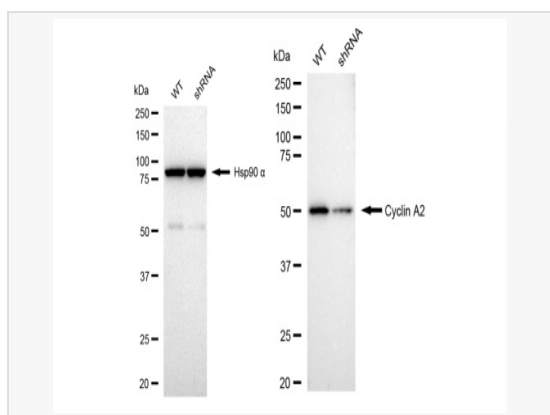
Flow cytometric analysis of Cyclin A2 expression in HepG2 cells using Cyclin A2 antibody (R020334, 1:2,000). Green, isotype control; red, Cyclin A2.



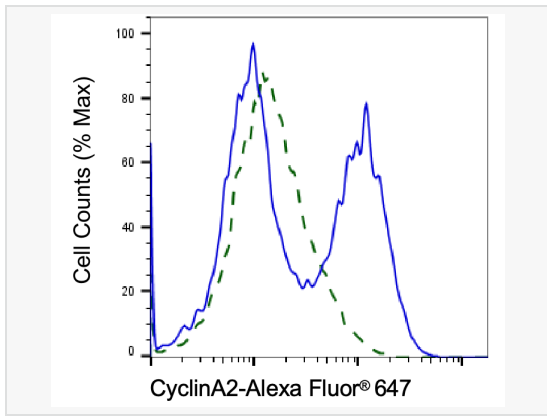
Immunocytochemical staining of HepG2 cells with Cyclin A2 antibody (R020334, 1:1,000). Nuclei were stained blue with DAPI; Cyclin A2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



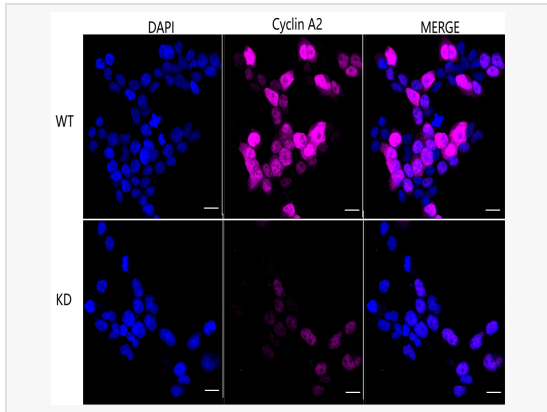
Western blotting analysis using Cyclin A2 antibody (R020334). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Cyclin A2 antibody (R020334, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Cyclin A2 antibody (R020334). Cyclin A2 expression in wild type (WT) and Cyclin A2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Cyclin A2 antibody (R020334, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of CyclinA2 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with CyclinA2 antibody (R020334, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using Cyclin A2 antibody (R020334, 1:1,000), Top panel: wild-type (WT); Bottom panel: Cyclin A2 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Cyclin A2 was stained magenta with Alexa Fluor® 647. Scale bar, 20  $\mu$ m. Permeabilization: Triton.