

# Datasheet for ABIN3043481

# anti-Cyclin A antibody (AA 10-168)

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Quantity:	100 μg	
Target:	Cyclin A (CCNA2)	
Binding Specificity:	AA 10-168	
Reactivity:	Human, Rat	
Host:	Rabbit	
Clonality:	Polyclonal	
Conjugate:	This Cyclin A antibody is un-conjugated	
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))	
Product Details		
Purpose:	Rabbit IgG polyclonal antibody for Cyclin-A2(CCNA2) detection. Tested with WB, IHC-P in Human,Rat.	
lmmunogen:	E.coli-derived human Cyclin A2 recombinant protein (Position: A10-K168). Human Cyclin A2 shares 74.5% amino acid (aa) sequence identity with mouse Cyclin A2.	
Isotype:	IgG	
Cross-Reactivity (Details):	No cross reactivity with other proteins.	
Characteristics:	Rabbit IgG polyclonal antibody for Cyclin-A2(CCNA2) detection. Tested with WB, IHC-P in Human,Rat.  Gene Name: cyclin A2  Protein Name: Cyclin-A2	
Purification:	Immunogen affinity purified.	

# **Target Details**

Target:	Cyclin A (CCNA2)	
Alternative Name:	CCNA2 (CCNA2 Products)	
Background:	Cyclin A2, known as CCNA2, is mapped to 4q27. 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 tested. This cyclin binds and activates CDC2 or CDK2 kinases, and thus promotes both cell cycle G1/S and G2/M transitions. And Cyclin A2 is synthesized at the onset of S phase and localizes to the nucleus, where the cyclin A2-CDK2 complex is implicated in the initiation and progression of DNA synthesis. Phosphorylation of CDC6 and MCM4 by the cyclin A2-CDK2 complex prevents re-replication of DNA during the cell cycle.	
	Synonyms: CCN1 antibody CCNA antibody CCNA2 antibody CCNA2_HUMAN antibody Cyclin A2 antibody Cyclin-A2 antibody Cyclin-A2 antibody	
	890	
Gene ID:	890	
Gene ID: UniProt:	P20248	
UniProt:	P20248  PI3K-Akt Signaling, Cell Division Cycle, AMPK Signaling, Mitotic G1-G1/S Phases, DNA	
UniProt: Pathways:	P20248  PI3K-Akt Signaling, Cell Division Cycle, AMPK Signaling, Mitotic G1-G1/S Phases, DNA	
UniProt:  Pathways:  Application Details	P20248  PI3K-Akt Signaling, Cell Division Cycle, AMPK Signaling, Mitotic G1-G1/S Phases, DNA  Replication, M Phase, Synthesis of DNA  WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Rat  IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.  Notes: Tested Species: Species with positive results. Other applications have not been tested.	

### Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 $\mu g/mL$ .
Concentration:	500 μg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	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.

#### **Publications**

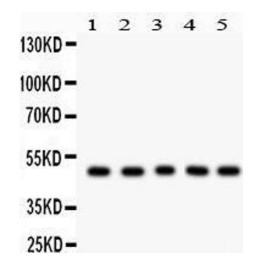
Product cited in:

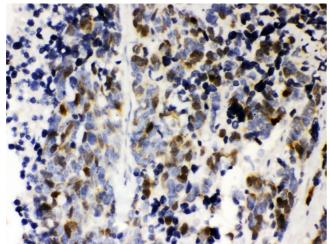
Zhang, Chang, Zhao, Gao, Wang, Li, Zhang, Zhang, Xu: "The novel protein C9orf116 promotes rat liver cell line BRL-3A proliferation." in: **PLoS ONE**, Vol. 12, Issue 7, pp. e0180607, (2017) (PubMed).

Zhang, Chang, Li, Zhang, Xu: "The novel protein C3orf43 accelerates hepatocyte proliferation." in: **Cellular & molecular biology letters**, Vol. 22, pp. 21, (2017) (PubMed).

Wang, Ge, Chen, Hu, Li, Song, Xu, Ye: "A New Double Stranded RNA Suppresses Bladder Cancer Development by Upregulating p21 (Waf1/CIP1) Expression." in: **BioMed research international**, Vol. 2015, pp. 304753, (2016) (PubMed).

Chen, Zhang, Liang, Zhou, Ding, Yang, Liu, Wu, Man, Zhang, Chen: "Activin A induces growth arrest through a SMAD- dependent pathway in hepatic progenitor cells." in: **Cell communication and signaling: CCS**, Vol. 12, pp. 18, (2014) (PubMed).





## **Western Blotting**

**Image 1.** Anti- Cyclin A2 Picoband antibody, Western blotting All lanes: Anti Cyclin A2 at 0.5ug/ml Lane 1: Rat Skeletal Muscle Tissue Lysate at 50ug Lane 2: HELA Whole Cell Lysate at 40ug Lane 3: COLO320 Whole Cell Lysate at 40ug Lane 4: HEPG2 Whole Cell Lysate at 40ug Lane 5: MCF-7 Whole Cell Lysate at 40ug Predicted bind size: 49KD Observed bind size: 49KD

#### **Immunohistochemistry**

Image 2. Anti- Cyclin A2 Picoband antibody, IHC(P) IHC(P): Human Lung Cancer Tissue