

## Cyclin A1 Polyclonal Antibody

<b>Catalog No :</b>	YT1168
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Cyclin A
<b>Fields :</b>	>>Cell cycle;>>AMPK signaling pathway;>>Cellular senescence;>>Progesterone-mediated oocyte maturation;>>Hepatitis B;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1 infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Viral carcinogenesis;>>Acute myeloid leukemia
<b>Gene Name :</b>	CCNA1
<b>Protein Name :</b>	Cyclin-A1
<b>Human Gene Id :</b>	8900
<b>Human Swiss Prot No :</b>	P78396
<b>Mouse Gene Id :</b>	12427
<b>Mouse Swiss Prot No :</b>	Q61456
<b>Rat Gene Id :</b>	295052
<b>Rat Swiss Prot No :</b>	Q6AY13
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Cyclin A1. AA range:411-460
<b>Specificity :</b>	Cyclin A1 Polyclonal Antibody detects endogenous levels of Cyclin A1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 52kD

**Cell Pathway :** AMPK

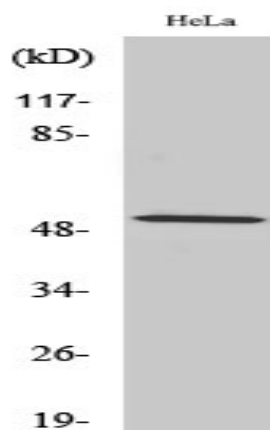
**Background :** The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. The cyclin encoded by this gene was shown to be expressed in testis and brain, as well as in several leukemic cell lines, and is thought to primarily function in the control of the germline meiotic cell cycle. This cyclin binds both CDK2 and CDC2 kinases, which give two distinct kinase activities, one appearing in S phase, the other in G2, and thus regulate separate functions in cell cycle. This cyclin was found to bind to important cell cycle regulators, such as Rb family proteins, transcription factor E2F-1, and the p21 family proteins. Multi

**Function :** developmental stage:Expression increases in early G1 phase and reaches highest levels during the S and G2/M phases.,function:May be involved in the control of the cell cycle at the G1/S (start) and G2/M (mitosis) transitions. May primarily function in the control of the germline meiotic cell cycle and additionally in the control of mitotic cell cycle in some somatic cells.,similarity:Belongs to the cyclin family.,similarity:Belongs to the cyclin family. Cyclin AB subfamily.,subunit:Interacts with the CDK2 and the CDC2 protein kinases to form a serine/threonine kinase holoenzyme complex. The cyclin subunit imparts substrate specificity to the complex. Does not bind CDK4 and CDK5 (in vitro). The cyclin A1-CDK2 complex interacts with transcription factor E2F-1 and RB proteins. Found in a complex with CDK2, CABLES1 and CCNE1 (By similarity). Interacts with INCA1 and KLHDC9.,tissue specificit

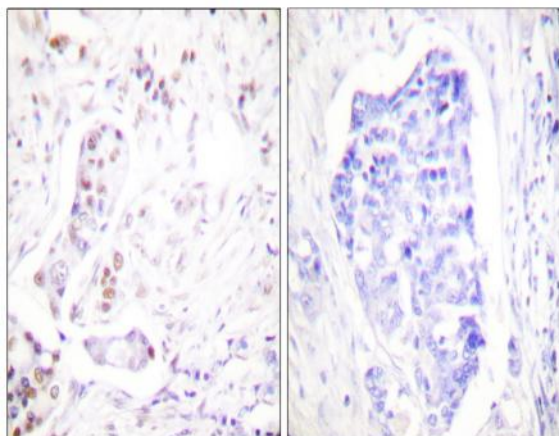
**Subcellular Location :** Nucleus .

**Expression :** Very high levels in testis and very low levels in brain. Also found in myeloid leukemia cell lines.

## Products Images



Western Blot analysis of HeLa cells using Cyclin A1 Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Cyclin A1 Antibody. The picture on the right is blocked with the synthesized peptide.