

# Anti-Cyclin A2 Picoband Antibody

Catalog # ABO12114

## Product Information

---

|                          |                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC-P                                                                                          |
| <b>Primary Accession</b> | <a href="#">P20248</a>                                                                             |
| <b>Host</b>              | Rabbit                                                                                             |
| <b>Reactivity</b>        | Human, Rat                                                                                         |
| <b>Clonality</b>         | Polyclonal                                                                                         |
| <b>Format</b>            | Lyophilized                                                                                        |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Cyclin-A2(CCNA2) detection. Tested with WB, IHC-P in Human;Rat. |

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Additional Information

---

|                                 |                                                                                                                                                                                   |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 890                                                                                                                                                                               |
| <b>Other Names</b>              | Cyclin-A2, Cyclin-A, CCNA2, CCN1, CCNA                                                                                                                                            |
| <b>Calculated MW</b>            | 48551                                                                                                                                                                             |
| <b>Application Details</b>      | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat                                                           |
| <b>Subcellular Localization</b> | Nucleus . Cytoplasm . Cytoplasmic when associated with SCAPER.                                                                                                                    |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                         |
| <b>Protein Name</b>             | Cyclin-A2                                                                                                                                                                         |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.                                                                                                               |
| <b>Immunogen</b>                | 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.                     |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                      |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                                           |
| <b>Storage</b>                  | 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. |
| <b>Sequence Similarities</b>    | Belongs to the cyclin family. Cyclin AB subfamily.                                                                                                                                |

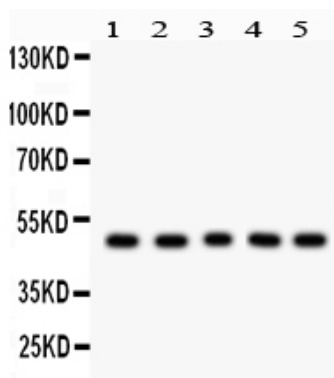
## Protein Information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | CCNA2 ( <a href="#">HGNC:1578</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Function          | Essential for the control of the cell cycle at G1/S and G2/M transition (PubMed: <a href="#">1312467</a> ). Functions through the formation of specific serine/threonine protein kinase holoenzyme complexes with the cyclin-dependent protein kinases CDK1 or CDK2. The cyclin subunit confers the substrate specificity of these complexes and differentially interacts with and activates CDK1 and CDK2 throughout the cell cycle (PubMed: <a href="#">41100585</a> ). |
| Cellular Location | Nucleus. Cytoplasm. Note=Exclusively nuclear during interphase (PubMed:1312467). Detected in the nucleus and the cytoplasm at prophase (PubMed:1312467). Cytoplasmic when associated with SCAPER (PubMed:17698606).                                                                                                                                                                                                                                                       |

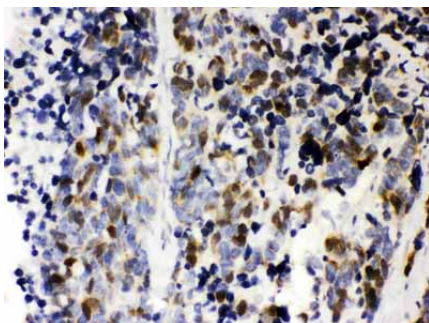
## Background

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.

## Images



Anti- Cyclin A2 Picoband antibody, ABO12114, Western blotting  
All lanes: Anti Cyclin A2 (ABO12114) 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



Anti- Cyclin A2 Picoband antibody, ABO12114,  
IHC(P)  
IHC(P): Human Lung Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.