

**Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3)**  
**Catalog # ABO16571****Specification****Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P24864</a> |
| Host              | Mouse                  |
| Isotype           | Mouse IgG2b            |
| Reactivity        | Human                  |
| Clonality         | Monoclonal             |
| Format            | Lyophilized            |

**Description**

Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) . Tested in WB applications. This antibody reacts with Human.

**Reconstitution**

Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

**Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) - Additional Information**

**Gene ID** 898

**Other Names**

G1/S-specific cyclin-E1, CCNE1, CCNE

**Calculated MW**

47 kDa KDa

**Application Details**

Western blot, 0.25-0.5 µg/ml, Human<br>

**Contents**

Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.

**Immunogen**

E.coli-derived human Cyclin E1/CCNE1 recombinant protein (Position: R3-A386).

**Purification**

Immunogen affinity purified.

**Storage**

**At -20°C for one year from date of receipt.  
After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen  
at -20°C for six months. Avoid repeated  
freezing and thawing.**

**Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) - Protein Information**

**Name** CCNE1

**Synonyms** CCNE

**Function**

Essential for the control of the cell cycle at the G1/S (start) transition.

**Cellular Location**

Nucleus.

**Tissue Location**

Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.

**Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) - Images**

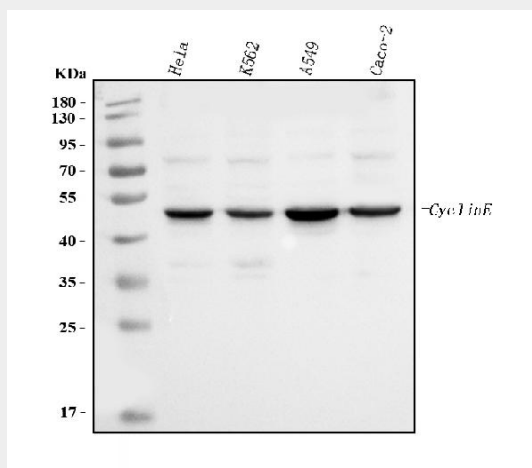


Figure 1. Western blot analysis of CCNE1 using anti-CCNE1 antibody (M00543-3).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human A549 whole cell lysates,

Lane 4: human CACO-2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-CCNE1 antigen affinity purified monoclonal antibody (Catalog #

M00543-3) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for CCNE1 at approximately 47 kDa. The expected band size for CCNE1 is at 47 kDa.

**Anti-Cyclin E1/CCNE1 Antibody Picoband™ (monoclonal, 8B9C3) - Background**

G1/S-specific cyclin-E1 is a protein that in humans is encoded by the CCNE1 gene. It is mapped to 19q12. 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. This cyclin forms a complex with and functions as a regulatory subunit of CDK2, whose activity is required for cell cycle G1/S transition. This protein accumulates at the G1-S phase boundary and is degraded as cells progress through S phase. Overexpression of this gene has been observed in many tumors, which results in chromosome instability, and thus may contribute to tumorigenesis. This protein was found to associate with, and be involved in, the phosphorylation of NPAT protein (nuclear protein mapped to the ATM locus), which participates in cell-cycle regulated histone gene expression and plays a critical role in promoting cell-cycle progression in the absence of pRB.