

## Cyclin E1 Antibody

Rabbit Polyclonal Antibody Catalog # ABV11443

### **Specification**

## **Cyclin E1 Antibody - Product Information**

Application IF, IHC, WB Primary Accession P24864

Reactivity Human, Mouse, Rat, Pig, Bovine, Dog

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 47077

# **Cyclin E1 Antibody - Additional Information**

Gene ID 898

Positive Control WB: HEK293T, mouse brain, PC12, SW626,

HeLa, K562, whole cell lysates, IHC: human

lung cancer, IC/IF: PC12 cells

Application & Usage WB: 1:500 - 1:1000, IHC: 1:100 - 1:200,

IF/IC: 1:100 - 1:500

**Other Names** 

CCNE1, Cyclin Es, Cyclin Et, G1/S-specific cyclin-E1

Target/Specificity

Cyclin E1

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

**Formulation** 

1 mg/ml in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Handling

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

#### **Precautions**

Cyclin E1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



# **Cyclin E1 Antibody - 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** 

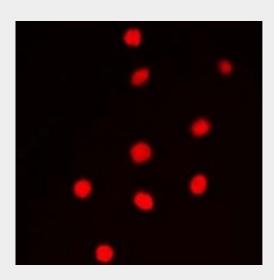
Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.

# Cyclin E1 Antibody - Protocols

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

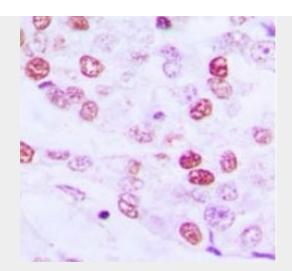
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Cyclin E1 Antibody - Images

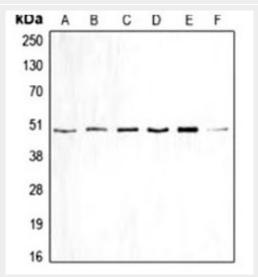


Immunofluorescent analysis of Cyclin E1 staining in PC12 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4  $\,^{\circ}$ C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).





Immunohistochemical analysis of Cyclin E1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Western blot analysis of Cyclin E1 expression in HEK293T (A), mouse brain (B), PC12 (C), SW626 (D), HeLa (E), K562 (F) whole cell lysates.

# Cyclin E1 Antibody - Background

Cyclin E1 is a regulatory subunit of the CDK2 kinase. It is central for the regulation of the G1/S transition and its abundance is tightly regulated throughout the cell cycle via ubiquitination. Cyclin E has been the subject of intense study in relation to tumorigenesis and cancer management and prognosis. Multiple isoforms of Cyclin E are only expressed in tumors but not in normal tissue, suggesting a post transcriptional regulation of Cyclin E. In vitro analyses indicated that these truncated variant isoforms of Cyclin E are able to phosphorylate histone H1. Alterations in the Cyclin E protein have been implicated as indicators of worse prognosis in various cancers.