

# Cyclin E1 Antibody

**ALTERNATE NAMES:** CCNE1, Cyclin Es, Cyclin Et, G1/S-specific cyclin-E1

**CATALOG #:** 6932-50

**AMOUNT:** 50 µl

**HOST/ISOTYPE:** Rabbit

**IMMUNOGEN:** This Cyclin E1 antibody is generated from KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cyclin E1. The exact sequence is proprietary.

**INTERNAL ID:** DM-01

**MOLECULAR WEIGHT:** ~50.00 kDa

**FORM:** Liquid

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

**PURIFICATION:** This antibody is purified by immunogen affinity chromatography.

**SPECIES REACTIVITY:** Human, Mouse, Rat, Bovine, Dog, Pig.

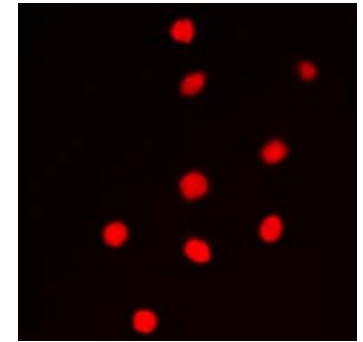
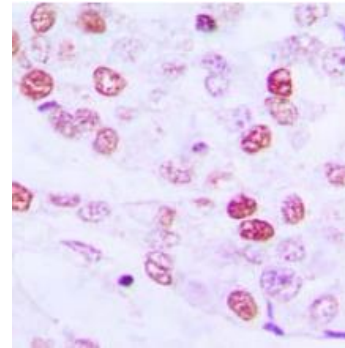
**STORAGE CONDITIONS:** Aliquot and store at -20°C for one year. Avoid freeze/thaw cycles.

**DESCRIPTION:** 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.

**APPLICATION:** WB: 1:500 - 1:1000, IHC: 1:100 – 1:200, IF/IC: 1:100 – 1:500.

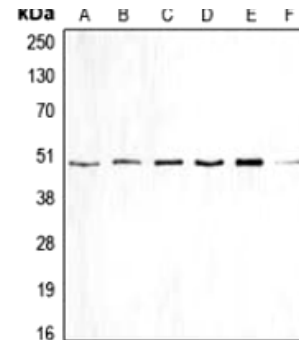
**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user.

**FOR RESEARCH USE ONLY! Not to be used on humans.**



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.

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 °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).



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

**RELATED PRODUCTS:**

- Cyclin F Antibody (Cat # 6933-50)
- Cyclin G1 Antibody (Cat # 6934-50)

