

## Basic Information

<b>Product Name</b>	Anti-Cyclin E1/CCNE1 Antibody	
<b>Gene Name</b>	CCNE1	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, FCM, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Cyclin E1/CCNE1 recombinant protein (Position: R3-A386).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	47 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

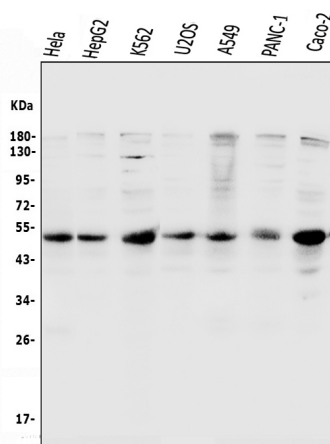
G1/S-specific cyclin-E1 is a protein that in humans is encoded by the CCNE1 gene. It is mapped to 19q12. The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function 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.

## Reference

Anti-Cyclin E1/CCNE1 Antibody 被引用在19文献中。

## Selected Validation Data



Western blot analysis of Cyclin E1/CCNE1 using anti-Cyclin E1/CCNE1 antibody (A00543-2). 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 HepG2 whole cell lysates,

Lane 3: Human K562 whole cell lysates,

Lane 4: Human U2OS whole cell lysates,

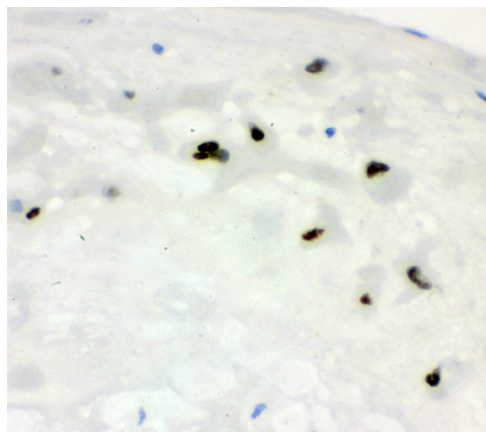
Lane 5: Human A549 whole cell lysates,

Lane 6: Human PANC-1 whole cell lysates,

Lane 7: Human CACO-2 whole cell lysates.

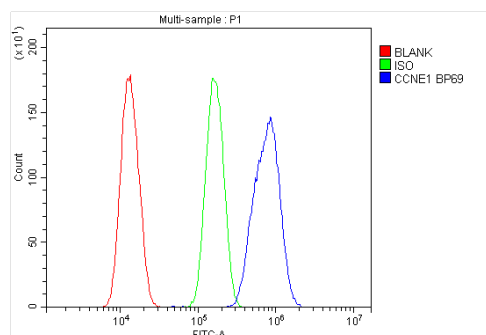
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Cyclin E1/CCNE1 antigen affinity purified polyclonal antibody (A00543-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cyclin E1/CCNE1 at approximately 47 kDa. The expected band size for Cyclin E1/CCNE1 is at 47 kDa.



IHC analysis of Cyclin E1/CCNE1 using anti-Cyclin E1/CCNE1 antibody (A00543-2).

Cyclin E1/CCNE1 was detected in a paraffin-embedded section of human placenta tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Cyclin E1/CCNE1 Antibody (A00543-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of SiHa cells using anti-Cyclin E1/CCNE1 antibody (A00543-2).

Overlay histogram showing SiHa cells stained with A00543-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Cyclin E1/CCNE1 Antibody (A00543-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.