

## **Product datasheet**

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# ARG66529 anti-Cyclin E1 antibody

Package: 100 μg Store at: -20°C

## **Summary**

Product Description Rabbit Polyclonal antibody recognizes Cyclin E1

Tested Reactivity Hu, Rat
Predict Reactivity Ms

Tested Application ICC/IF, IHC-P, WB

Host Rabbit
Clonality Polyclonal

Isotype IgG

Target Name Cyclin E1
Species Human

Immunogen Synthetic peptide within aa. 60-140 of Human Cyclin E1.

Conjugation Un-conjugated

Alternate Names pCCNE1; CCNE; G1/S-specific cyclin-E1

## **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:200 - 1:1000
	IHC-P	1:100 - 1:300
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: High-pressure and temperature EDTA buffer (pH 8.0).  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 47 kDa	

## **Properties**

Form	Liquid	
Durification	A ESC in the constitution of the construction	
Purification	Affinity purification with immunogen.	
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.	
Preservative	0.02% Sodium azide	
Stabilizer	50% Glycerol and 0.5% BSA	
Concentration	1 mg/ml	
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw	

For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

CCNE1

Gene Full Name

cyclin E1

Background

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. Two alternatively spliced transcript variants of this gene, which encode distinct isoforms, have been described. Two additional splice variants were reported but detailed nucleotide sequence information is not yet available. [provided by RefSeq, Jul 2008]

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

Research Area Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody; Cell Cycle

Study antibody

Calculated Mw 47 kDa

PTM Phosphorylation of both Thr-395 by GSK3 and Ser-399 by CDK2 creates a high affinity degron

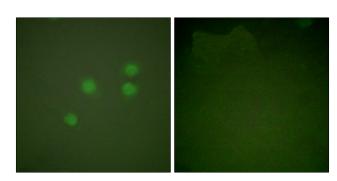
recognized by FBXW7, and accelerates degradation via the ubiquitin proteasome pathway.

Phosphorylation at Thr-77 creates a low affinity degron also recognized by FBXW7.

Ubiquitinated by UHRF2; appears to occur independently of phosphorylation. [UniProt]

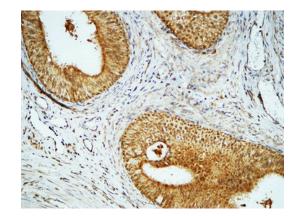
Cellular Localization Nucleus. [UniProt]

#### **Images**



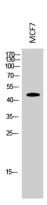
#### ARG66529 anti-Cyclin E1 antibody ICC/IF image

Immunofluorescence: A549 cells stained with ARG66529 anti-Cyclin E1 antibody. The picture on the right is blocked with the synthetic peptide.



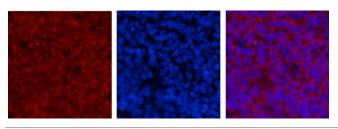
## ARG66529 anti-Cyclin E1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human testis stained with ARG66529 anti-Cyclin E1 antibody at 1:200 (4°C, overnight). Antigen Retrieval: High-pressure and temperature EDTA buffer (pH 8.0).



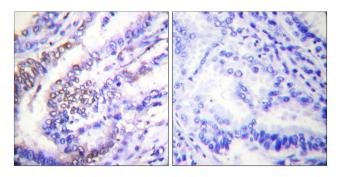
#### ARG66529 anti-Cyclin E1 antibody WB image

Western blot: MCF7 cell lysate stained with ARG66529 anti-Cyclin E1 antibody at 1:500 dilution.



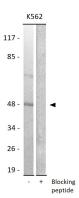
## ARG66529 anti-Cyclin E1 antibody IHC image

Immunohistochemistry: Rat spleen tissue stained with ARG66529 anti-Cyclin E1 antibody (red) at 1:200 (4 $^{\circ}$ C, overnight). DAPI (blue) for nuclear staining.



## ARG66529 anti-Cyclin E1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung carcinoma stained with ARG66529 anti-Cyclin E1 antibody. The picture on the right is blocked with the synthetic peptide.



## ARG66529 anti-Cyclin E1 antibody WB image

Western blot: K562 cell lysate stained with ARG66529 anti-Cyclin E1 antibody. The lane on the right is blocked with the synthetic peptide.