

## Cyclin E1 Polyclonal Antibody

<b>Catalog No :</b>	YT1176
<b>Reactivity :</b>	Human;Mouse;Rat;Pig
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Cyclin E1
<b>Fields :</b>	>>Cell cycle;>>Oocyte meiosis;>>p53 signaling pathway;>>PI3K-Akt signaling pathway;>>Cellular senescence;>>Cushing syndrome;>>Hepatitis B;>>Measles;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1 infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral carcinogenesis;>>MicroRNAs in cancer;>>Prostate cancer;>>Small cell lung cancer;>>Gastric cancer
<b>Gene Name :</b>	CCNE1
<b>Protein Name :</b>	G1/S-specific cyclin-E1
<b>Human Gene Id :</b>	898
<b>Human Swiss Prot No :</b>	P24864
<b>Mouse Gene Id :</b>	12447
<b>Mouse Swiss Prot No :</b>	Q61457
<b>Rat Swiss Prot No :</b>	P39949
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Cyclin E1. AA range:91-140
<b>Specificity :</b>	Cyclin E1 Polyclonal Antibody detects endogenous levels of Cyclin E1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 49kD

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**Cell Pathway :** Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;Oocyte meiosis;p53;Pathways in cancer;Prostate cancer;Small cell lung cancer;

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**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

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**Function :** function:Essential for the control of the cell cycle at the G1/S (start) transition.,PTM:Phosphorylation of Thr-395 by GSK3 and of Ser-399 by CDK2 accelerates degradation via the ubiquitin proteasome pathway. Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the cyclin family. Cyclin E subfamily.,subunit:Interacts with a member of the CDK2/CDK protein kinases to form a serine/threonine kinase holoenzyme complex. The cyclin subunit imparts substrate specificity to the complex. Interacts with retinoblastoma binding protein 3 and retinoblastoma-like protein 1. Found in a complex with CDK2, CABLES1 and CCNA1 (By similarity). Part of a complex consisting of UHRF2, CDK2 and CCNE1.,tissue specificity:Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.,

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**Subcellular Location :** Nucleus .

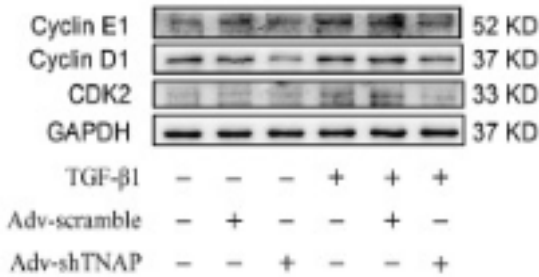
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**Expression :** Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.

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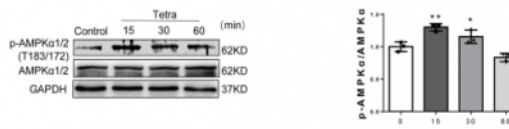
**Products Images**

**b**



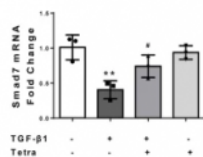
Cheng, Xiaocheng, et al. "TNAP is a novel regulator of cardiac fibrosis after myocardial infarction by mediating TGF-β/Smads and ERK1/2 signaling pathways." *EBioMedicine* 67 (2021): 103370.

**A**

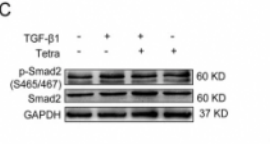


Gao, L., Wang, Ly., Liu, Zq. et al. TNAP inhibition attenuates cardiac fibrosis induced by myocardial infarction through deactivating TGF-β1/Smads and activating P53 signaling pathways. *Cell Death Dis* 11, 44 (2020)

**B**



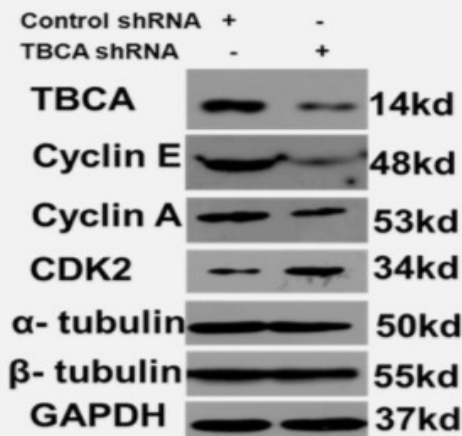
**C**



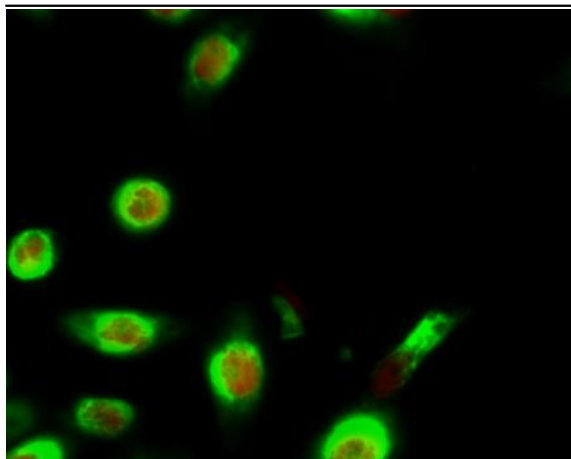
**D**



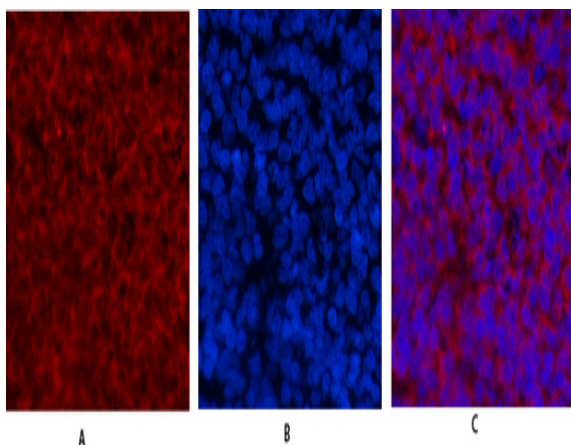
**e**



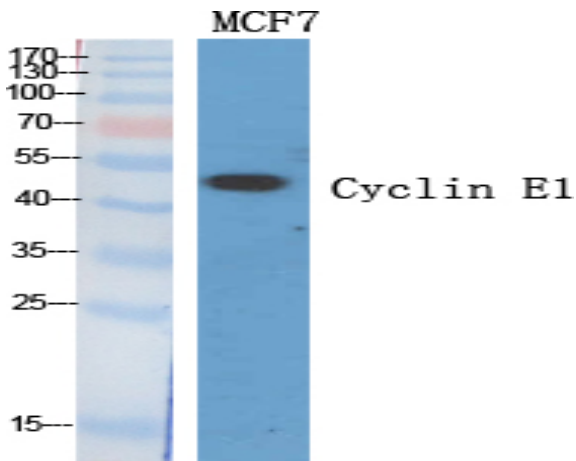
Zhang, Peng, et al. "Tubulin cofactor A functions as a novel positive regulator of ccRCC progression, invasion and metastasis." *International journal of cancer* 133.12 (2013): 2801-2811.



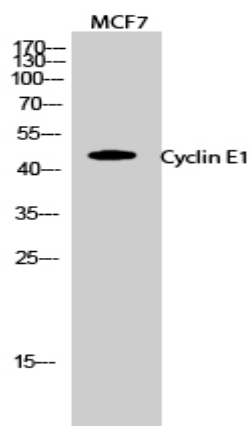
Immunofluorescence analysis of HeLa cell. 1, Cyclin E1 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight).  $\beta$ -Tubulin Monoclonal Antibody (5G3) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



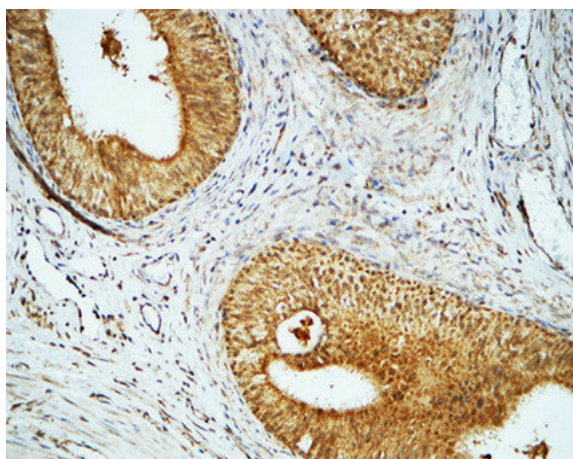
Immunofluorescence analysis of rat-spleen tissue. 1, Cyclin E1 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture C: merge of A+B



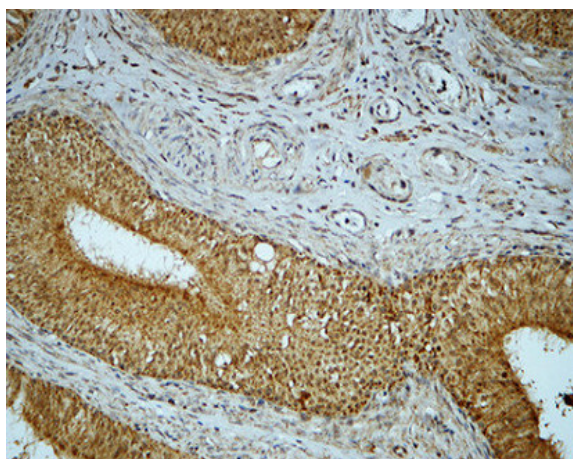
Western Blot analysis of various cells using Cyclin E1 Polyclonal Antibody diluted at 1:500



Western Blot analysis of MCF7 cells using Cyclin E1 Polyclonal Antibody diluted at 1:500



Immunohistochemical analysis of paraffin-embedded Human testis. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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Immunofluorescence analysis of A549 cells, using Cyclin E1 Antibody. The picture on the right is blocked with the synthesized peptide.