



Cyclin E1 Polyclonal Antibody

Catalog No	YP-Ab-16728
Isotype	IgG
Reactivity	Human;Mouse;Rat;Pig
Applications	WB;IHC;IF;ELISA
Gene Name	CCNE1
Protein Name	G1/S-specific cyclin-E1
Immunogen	The antiserum was produced against synthesized peptide derived from human Cyclin E1. AA range:91-140
Specificity	Cyclin E1 Polyclonal Antibody detects endogenous levels of Cyclin E1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CCNE1; CCNE; G1/S-specific cyclin-E1
Observed Band	49kD
Cell Pathway	Nucleus .
Tissue Specificity	Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.
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.,
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

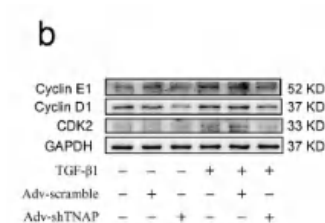
matters needing attention

Avoid repeated freezing and thawing!

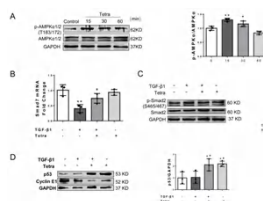
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

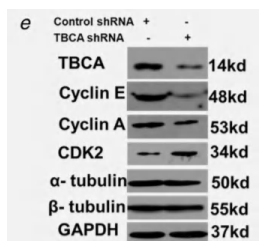
Products Images



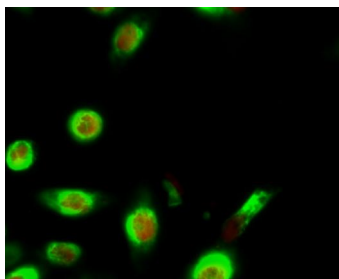
Cheng, Xiaocheng, et al. "TNAP is a novel regulator of cardiac fibrosis after myocardial infarction by mediating TGF-β/Smads and ERK1/2 signaling pathways." *EBioMedicine* 67 (2021): 103370.



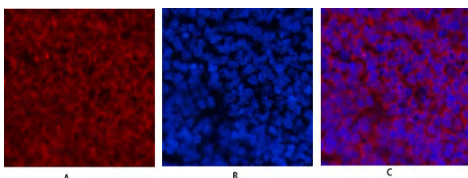
Gao, L., Wang, Ly., Liu, Zq. et al. TNAP inhibition attenuates cardiac fibrosis induced by myocardial infarction through deactivating TGF-β1/Smads and activating P53 signaling pathways. *Cell Death Dis* 11, 44 (2020)



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). β-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 B: DAPI. Picture C: merge of A+B