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CCNE1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6270b

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P24864
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB07335
Calculated MW	47077
Antigen Region	373-402

Additional Information

Gene ID	898
Other Names	G1/S-specific cyclin-E1, CCNE1, CCNE
Target/Specificity	This CCNE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 373-402 amino acids from the C-terminal region of human CCNE1.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CCNE1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCNE1
Synonyms	CCNE
Function	Essential for the control of the cell cycle at the G1/S (start) transition.

Cellular Location Nucleus.

Tissue Location Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.

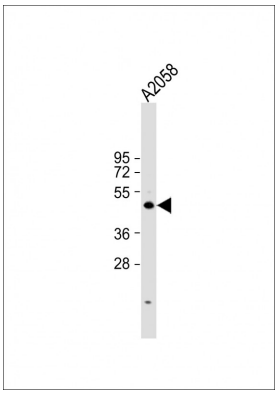
Background

Cyclin E1 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. Cyclin E1 forms a complex with and functions as a regulatory subunit of CDK2, whose activity is required for cell cycle G1/S transition. Cyclin E1 accumulates at the G1-S phase boundary and is degraded as cells progress through S phase. Overexpression of Cyclin E1 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.

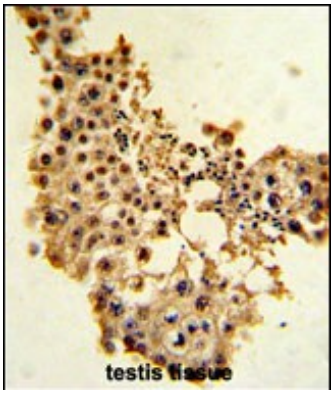
References

Ausserlechner, M.J., et al., Leukemia 19(6):1051-1057 (2005).
Wingate, H., et al., J. Biol. Chem. 280(15):15148-15157 (2005).
Honda, R., et al., EMBO J. 24(3):452-463 (2005).
Brzezinski, J., et al., Clin. Cancer Res. 11(3):1037-1043 (2005).
Hayami, R., et al., Cancer Res. 65(1):6-10 (2005).

Images

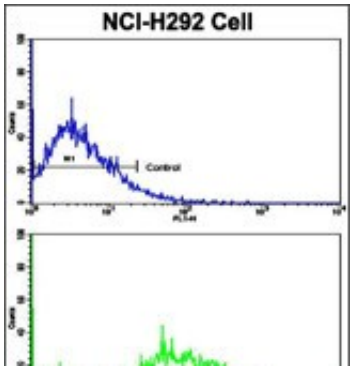


Anti-Cyclin E1 Antibody at 1:1000 dilution + A2058 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human testis tissue with Cyclin E1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Flow cytometric analysis of NCI-H292 cells using Cyclin E1 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated



goat-anti-rabbit secondary antibodies were used for the analysis.