

Product name:	Cyclin E1 (phospho Thr77) Rabbit Polyclonal Antibody
Cat number:	ABN04525
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Cyclin E1 around the phosphorylation site of Thr77. AA range:43-92
Reactivity:	Human,Rat,Mouse
Applications:	IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 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.,