ARG58045
anti-Cyclin E1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Cyclin E1
Tested Reactivity	Hu
Tested Application	ICC/IF, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Cyclin E1
Species	Human
Immunogen	Synthetic peptide derived from Human Cyclin E1.
Conjugation	Un-conjugated
Alternate Names	pCCNE1; CCNE; G1/S-specific cyclin-E1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IP	1:50
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa
Observed Size	~ 50 kDa

Properties

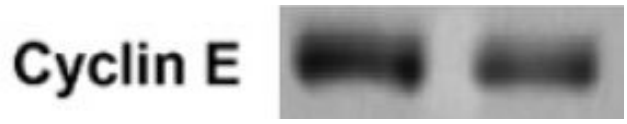
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	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]

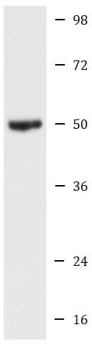
Images



ARG58045 anti-Cyclin E1 antibody WB image

Western blot: HGC-27 stained with ARG58045 anti-Cyclin E1 antibody.

From Sun DP et al. Am J Cancer Res- (2021), PMID: 34249424, Fig. 3. D.



ARG58045 anti-Cyclin E1 antibody WB image

Western blot: HeLa cell lysate stained with ARG58045 anti-Cyclin E1 antibody.