
Product Name: KD-Validated Cyclin E1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA00748

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 47.1kDa

Antigen Information

Gene Name	CCNE1
Alternative Names	CCNE1; Cyclin E1; CCNE; G1/S-Specific Cyclin-E1; Cyclin Es; Cyclin Et; PCCNE1
Gene ID	898.0
SwissProt ID	P24864
Immunogen	A synthesized peptide derived from human Cyclin E1

Background

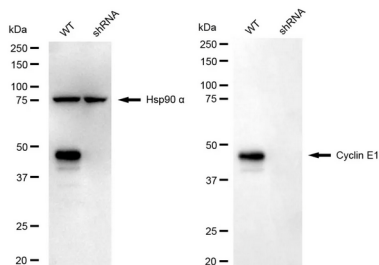
The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns 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. [provided by RefSeq, Apr 2016]

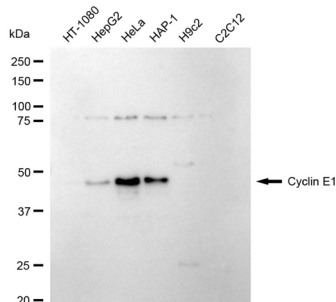
Research Area

Cell Biology, Epigenetics and Nuclear Signaling, Cancer

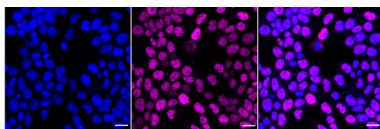
Image Data



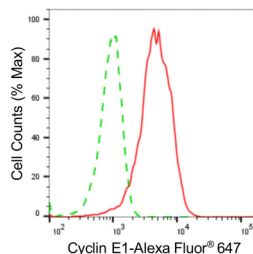
Western blotting analysis using cyclin E1 antibody (KVA00748). Cyclin E1 expression in wild-type (WT) and cyclin E1 (CCNE1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with cyclin E1 antibody (KVA00748, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using cyclin E1 antibody (KVA00748). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with cyclin E1 antibody (KVA00748, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with cyclin E1 antibody (KVA00748, 1:1,000). Nuclei were stained blue with DAPI; Cyclin E1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of Cyclin E1 expression in HeLa cells using Cyclin E1 antibody (KVA00748, 1:2,000). Green, isotype control; red, Cyclin E1.