Anti-Cyclin E1 Antibody

ER1906-94

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Tissue, FC
Molecular Wt:	45 KDa

Description: 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. 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.

Immunogen: KLH conjugated synthetic peptide derived from rat Cyclin E 375-411/411

Positive control: Highly expressed in testis and placenta. Low levels in bronchial epithelial cells.

Subcellular location: Nucleus.

Database links: SwissProt: P39949 Rat

Recommended Dilutions:

WB	1:500-2000
IHC-P	1:100-500
IF-tissue	1:100-500
FC	1μg/Test

Storage Buffer: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage Instruction: Store at -20℃ for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20℃. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4℃.

Purity: Protein A affinity purified.

Images

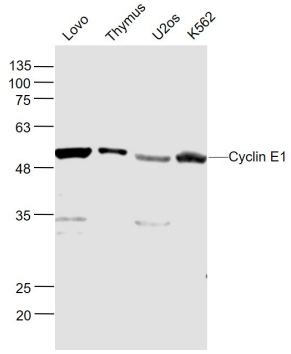

Fig1: Sample:
Lovo (Human) Cell Lysate at 30 ug
Thymus (Mouse) Lysate at 40 ug
U2os (Human) Cell Lysate at 30 ug
K562 (Human) Cell Lysate at 30 ug
Primary: Anti- Cyclin E1 (ER1906-94) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 45 kD
Observed band size: 50 kD

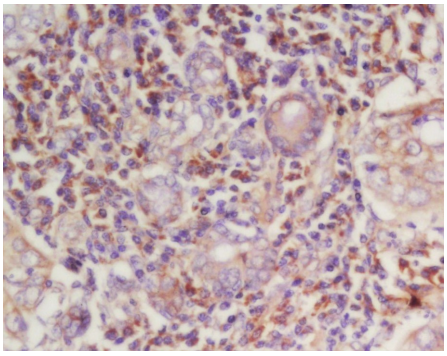

Fig2: Tissue/cell: human laryngocarcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Cyclin-E Polyclonal Antibody, Unconjugated(ER1906-94) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

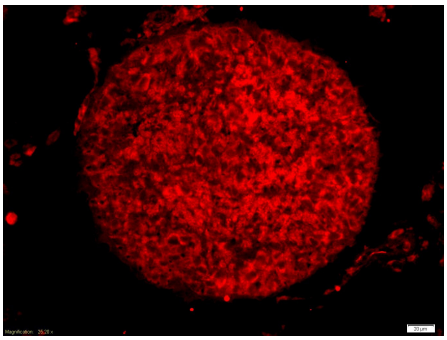

Fig3: Tissue/cell: rat testis tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Cyclin E Polyclonal Antibody, Unconjugated(ER1906-94) 1:200, overnight at 4℃; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated used at 1:200 dilution for 40 minutes at 37℃.

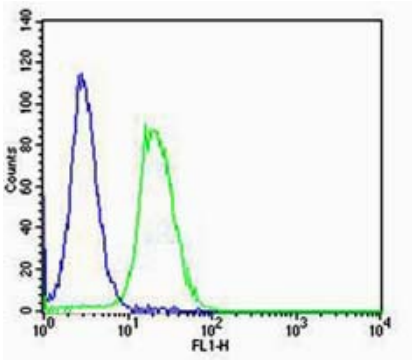

Fig4: Cell: NIH/3T3
Concentration:1:100
Host/Isotype:Rabbit/IgG
Flow cytometric analysis of primary antibody (Cat#: ER1906-94) on NIH/3T3(green) compared with Rabbit IgG isotype control in the absence of primary antibody (blue) followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG(H+L) secondary antibody .

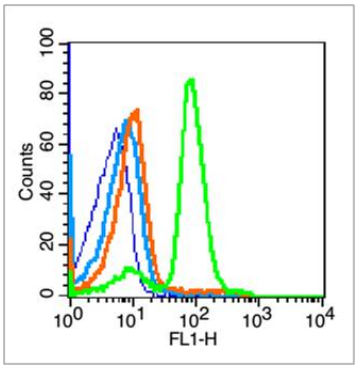

Fig5: Blank control (blue line): Mouse spleen cells (blue).
Primary Antibody (green line): Rabbit Anti-Cyclin E1 antibody (ER1906-94)
Dilution: 1μg /10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC
Dilution: 1μg /test.
Protocol
The cells were fixed with 70% ethanol (overninght at 4℃) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".