

Rabbit Anti-Cyclin E1 antibody

SL0573R

Product Name	Cyclin E1
Chinese Name	周期素 E 抗体
Alias	CCNE 1; CCNE; CCNE1; Cyclin Es; Cyclin Et; CyclinE; G1/S specific cyclin E; G1/S-specific cyclin-E1; CCNE1_HUMAN; pCCNE1.
Research Area	Cell biology Cyclin
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat, WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1µg/Test (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	45kDa
Cellular localization	The nucleus
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from rat Cyclin E: 375-411/411
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product	The protein encoded by this gene belongs to the highly conserved cyclin family, whose

Detail

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. Transcript Variant: This variant (1) contains a different 5' end region, which includes an upstream in-frame translation start codon, when compared to variant 2. The encoded protein has a 15 aa longer N-terminus, as compared to isoform 2.

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. Found in a complex with CDK2, CABLES1 and CCNA1 (By similarity). Part of a complex consisting of UHRF2, CDK2 and CCNE1. Interacts directly with UHRF2; the interaction ubiquitinates CCNE1 and appears to occur independently of CCNE1 phosphorylation.

Subcellular Location:

Nucleus.

Tissue Specificity:

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

Post-translational modifications:

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.

SWISS:

P39949

Gene ID:

25729

Database links:

[Entrez Gene: 898](#) Human

[Entrez Gene: 12447](#) Mouse

[Entrez Gene: 25729](#) Rat

[Omim: 123837](#) Human

[SwissProt: P24864](#) Human

[SwissProt: Q61457](#) Mouse

[SwissProt: P39949](#) Rat

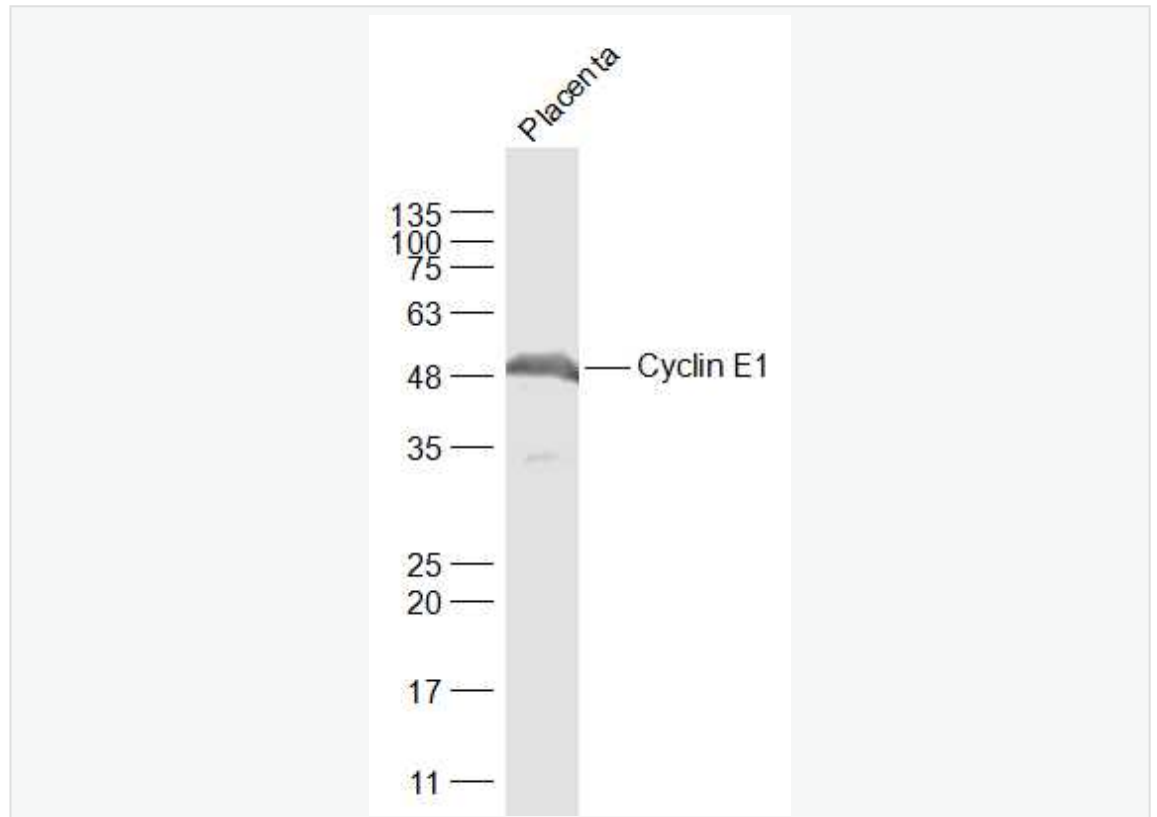
[Unigene: 244723](#) Human

[Unigene: 16110](#) Mouse

[Unigene: 15455](#) Rat

细胞周期素 E 是调控细胞 G-1→S 期转变的关键因素。由于在多种 Tumour 中的不适当表达,细胞周期素 E 现在已明确为原癌基因。

**Product
Picture**



Sample:

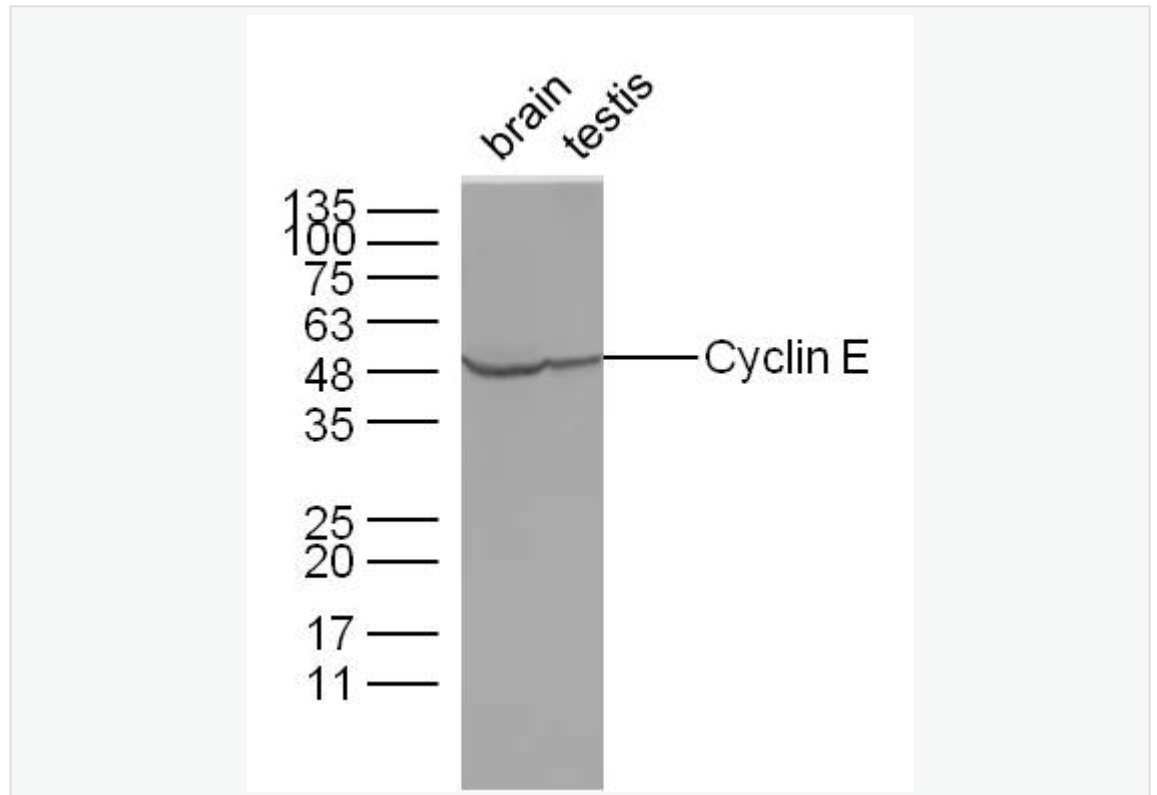
Placenta (Mouse) Lysate at 40 ug

Primary: Anti-Cyclin E1 (SL0573R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD

Observed band size: 48 kD



Sample:

Brain(Mouse) Lysate at 40 ug

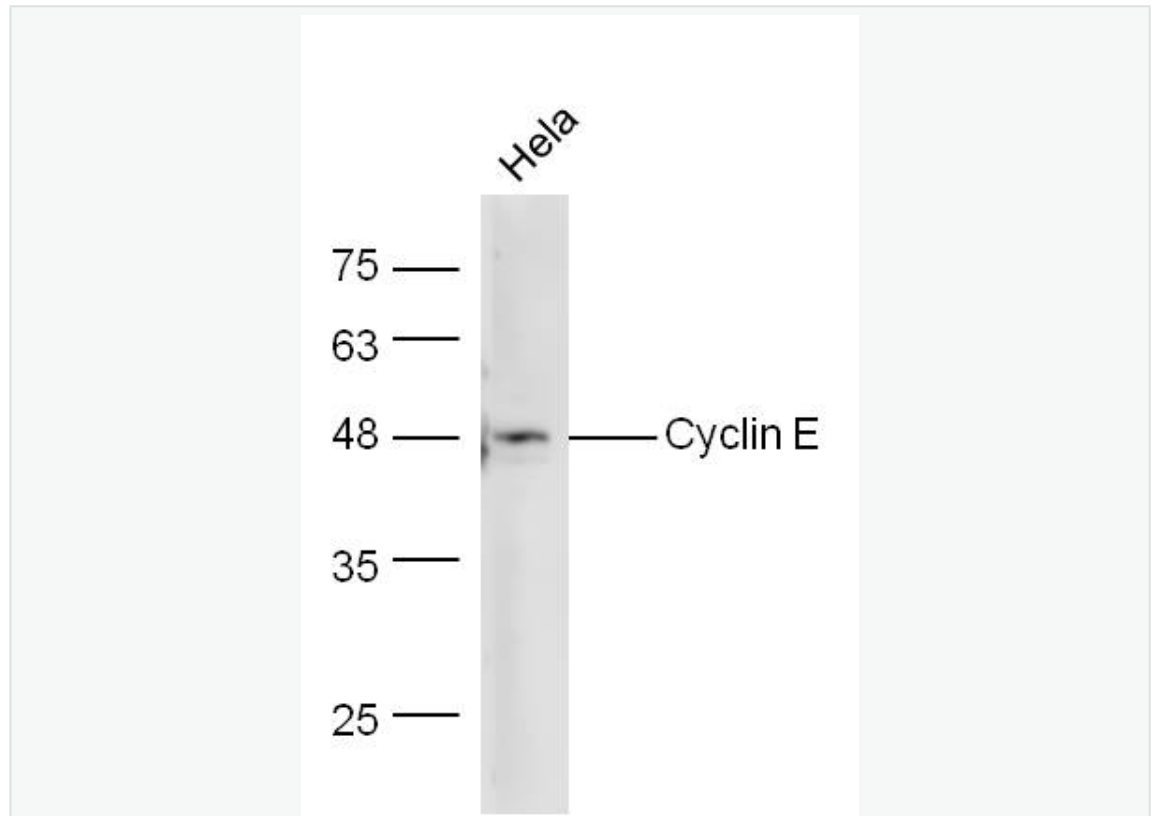
Testis(Mouse) Lysate at 40 ug

Primary: Anti-Cyclin E (SL0573R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 45 kD

Observed band size: 48 kD



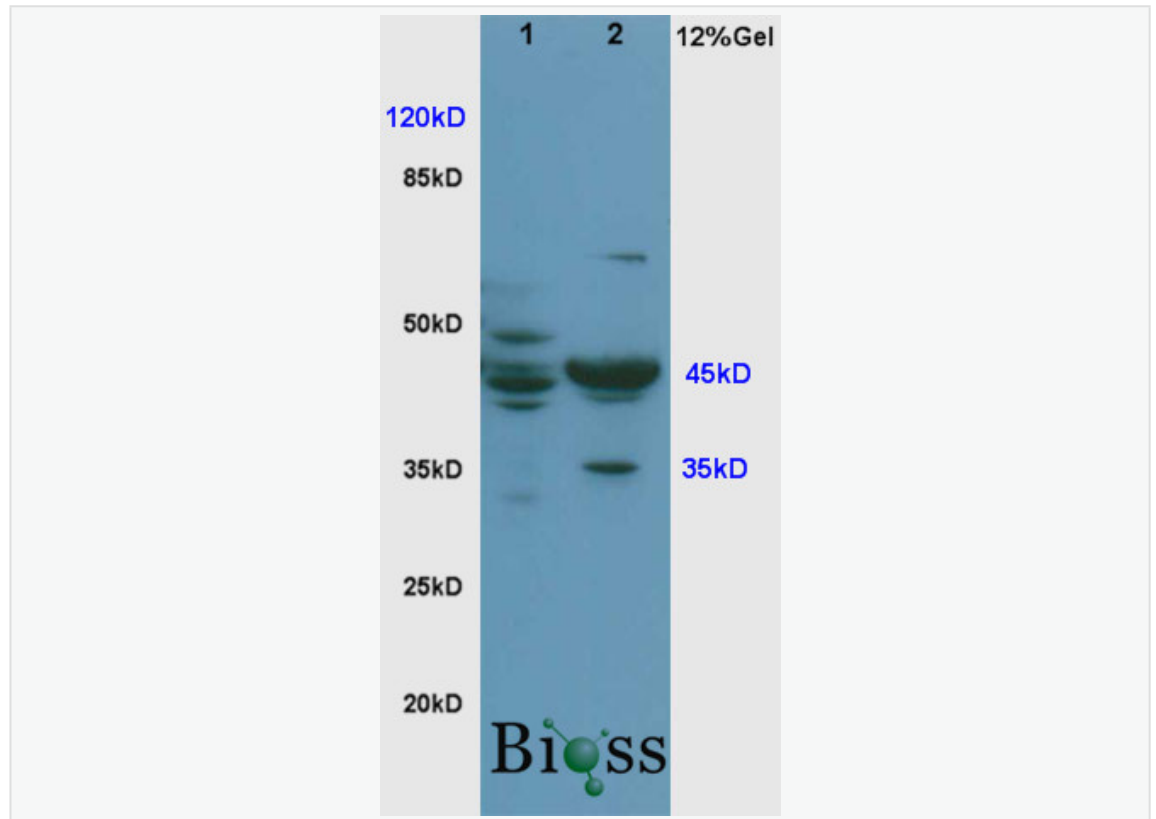
Sample: HeLa Lysate at 40 ug

Primary: Anti-Cyclin E (SL0573R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 45 kD

Observed band size: 48 kD



Sample:

Brain(Rat) lysate at30ug;

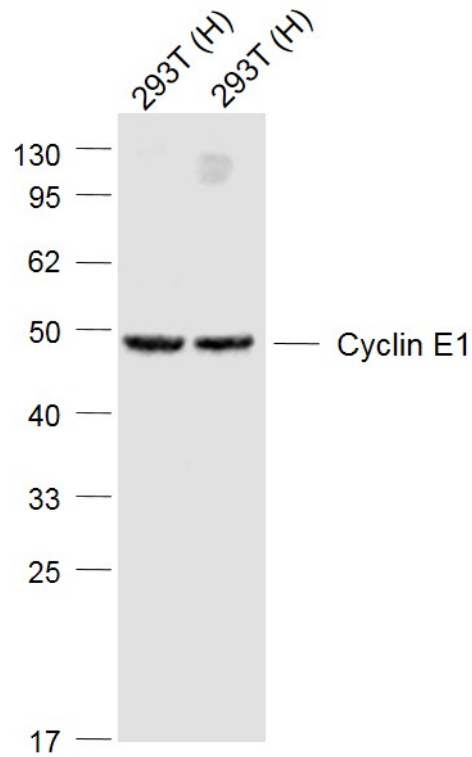
Lung(Rat) lysate at 30ug;

Primary: Anti-Cyclin E (SL0573R) at 1:200;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG(bse-0295G) at 1: 3000;

Predicted band size : 45kD

Observed band size : 45kD



Sample:

Lane 1: 293T (Human) Cell Lysate at 30 ug

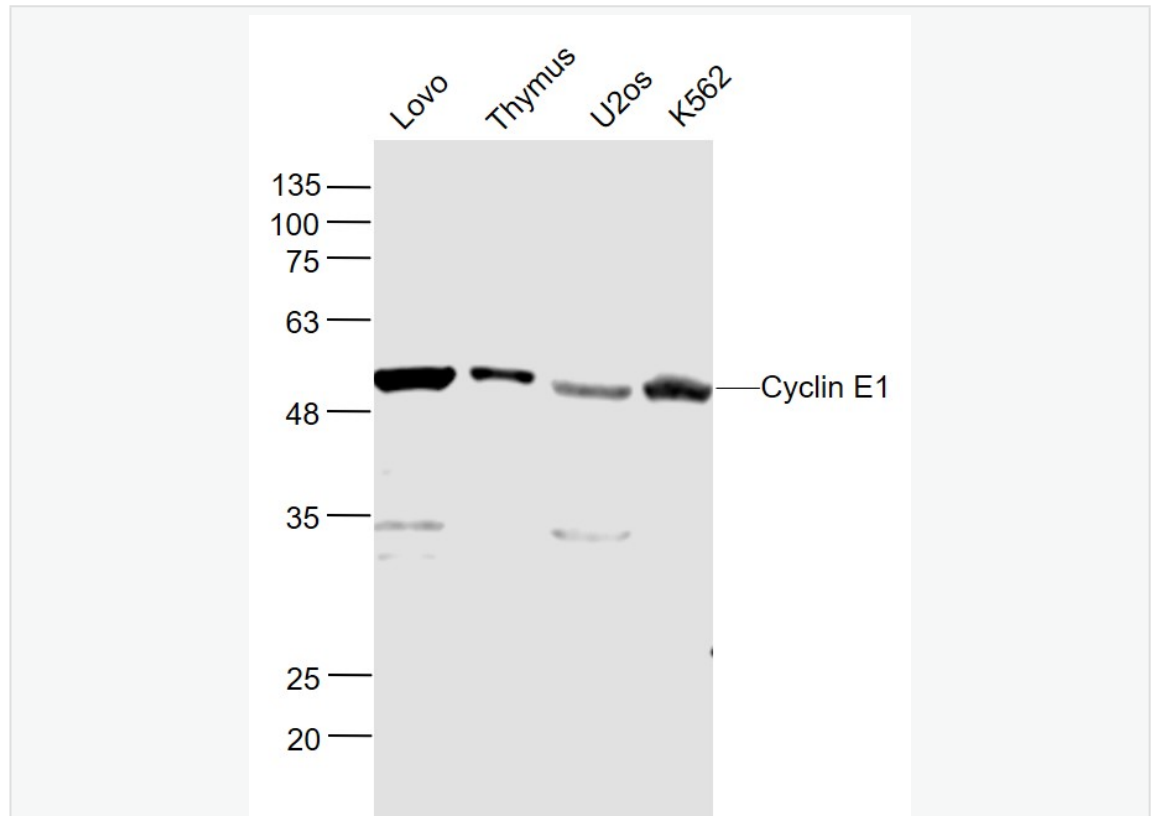
Lane 2: 293T (Human) Cell Lysate at 30 ug

Primary: Anti-Cyclin E1 (SL0573R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 50 kD

Observed band size: 49 kD



Sample:

Lovo (Human) Cell Lysate at 30 ug

Thymus (Mouse) Lysate at 40 ug

U2os (Human) Cell Lysate at 30 ug

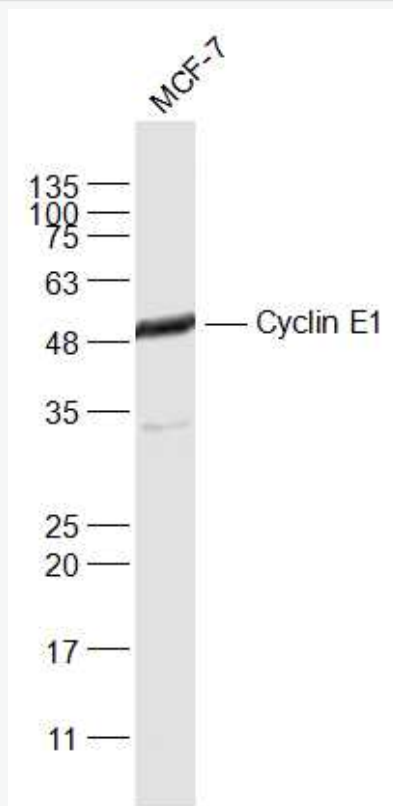
K562 (Human) Cell Lysate at 30 ug

Primary: Anti- Cyclin E1 (SL0573R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD

Observed band size: 50 kD



Sample:

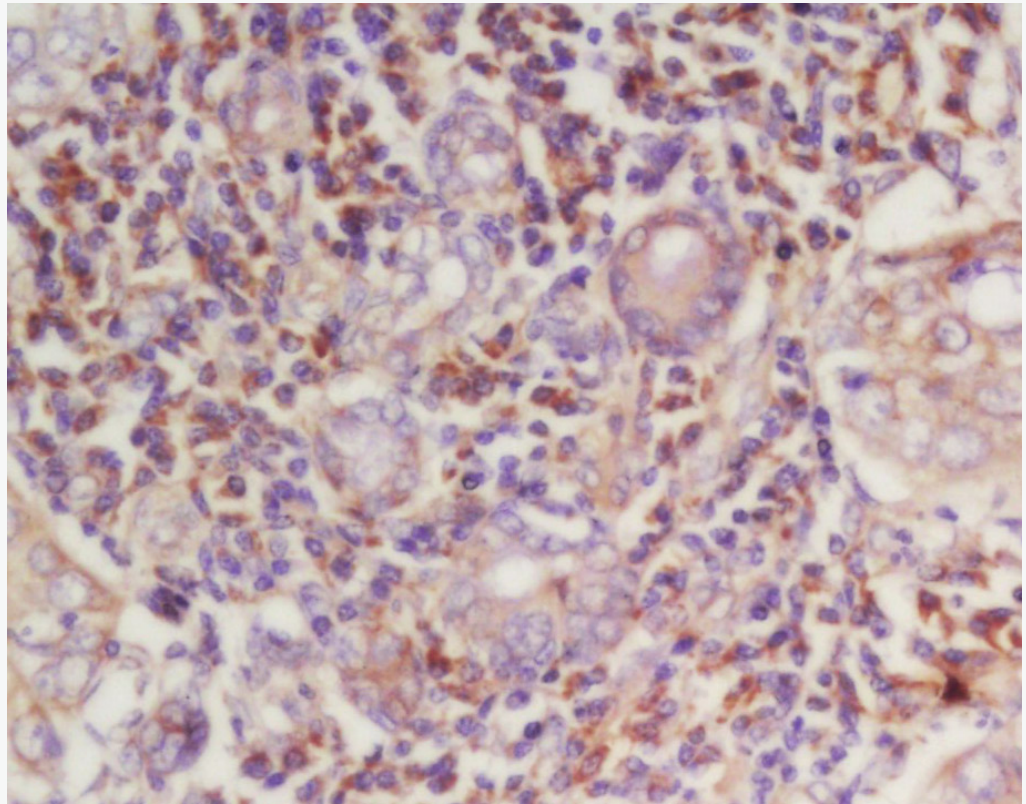
MCF-7(Human) Cell Lysate at 30 ug

Primary: Anti-Cyclin E1 (SL0573R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD

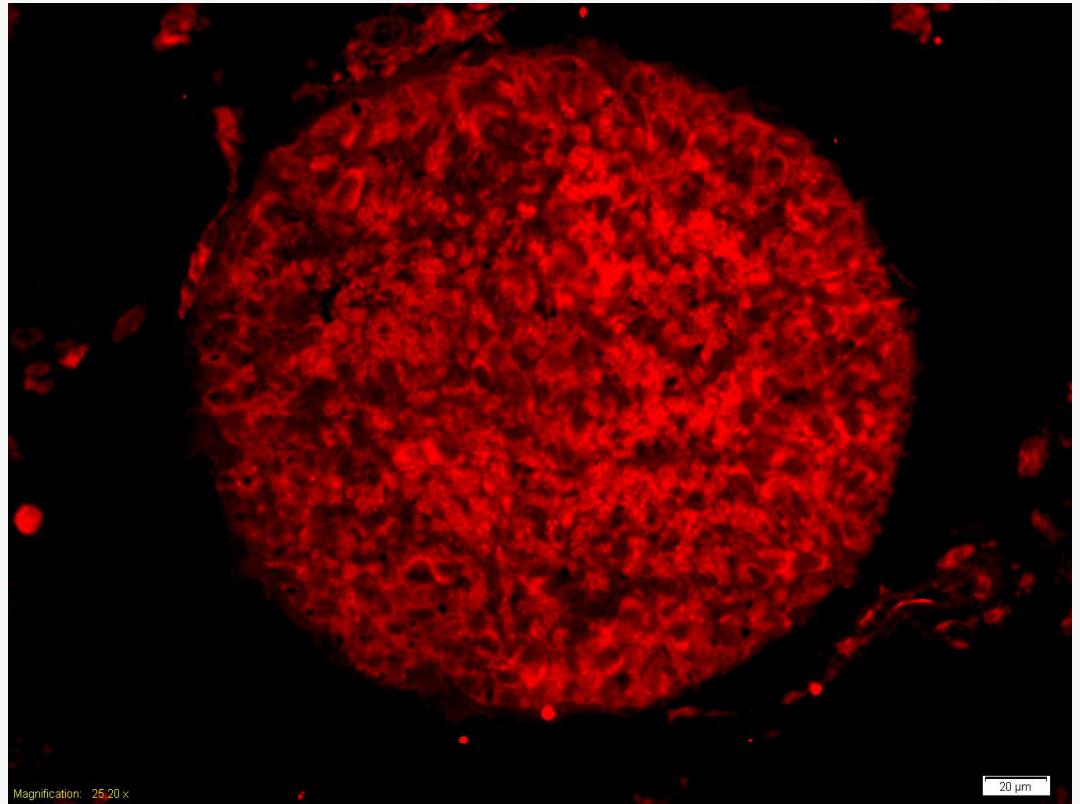
Observed band size: 48 kD



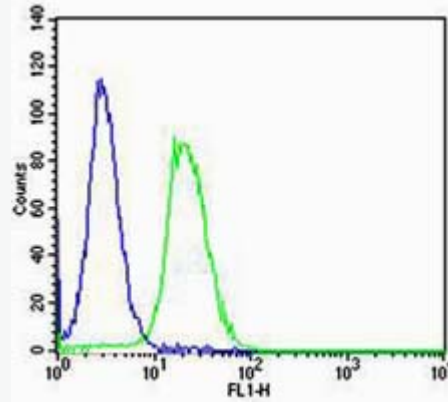
Tissue/cell: human laryngocarcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, 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°C for 20 min;

Incubation: Anti-Cyclin-E Polyclonal Antibody, Unconjugated(SL0573R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat testis tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Blocking
buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-Cyclin E Polyclonal Antibody, Unconjugated(SL0573R) 1:200,
overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3
conjugated(SL0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C.

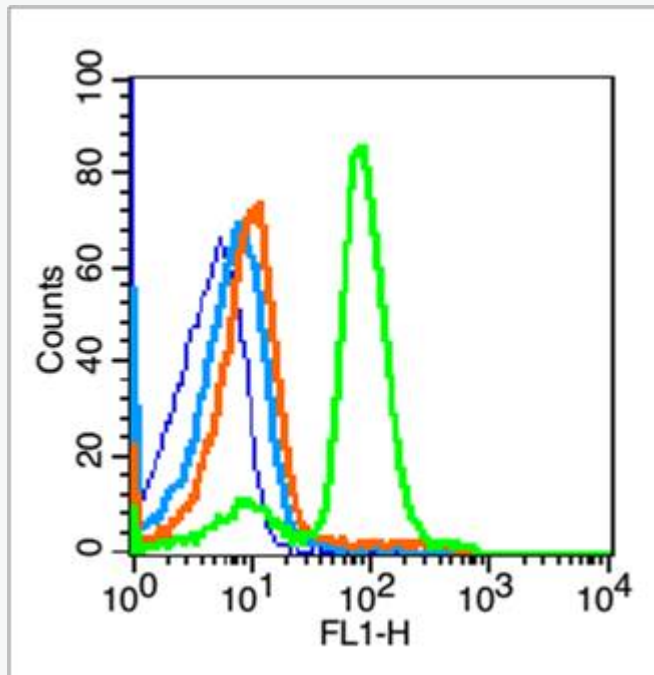


Cell: NIH/3T3

Concentration:1:100

Host/Isotype:Rabbit/IgG

Flow cytometric analysis of primary antibody (Cat#: SL0573R) 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 .



Blank control (blue line): Mouse spleen cells (blue).

Primary Antibody (green line): Rabbit Anti-Cyclin E1 antibody (SL0573R)

Dilution: $1\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

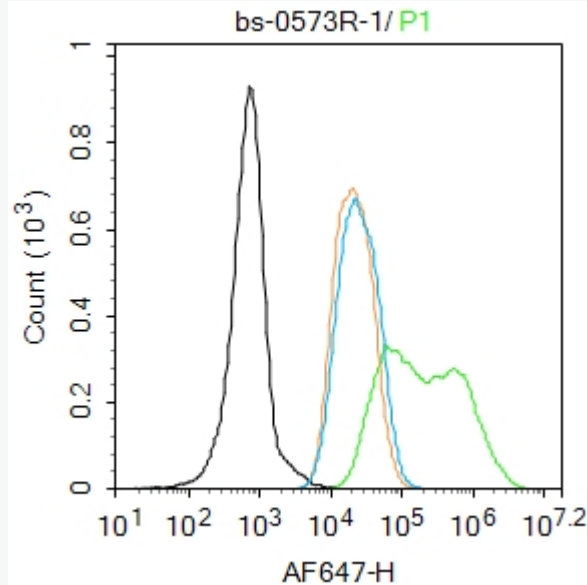
Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC

Dilution: $1\mu\text{g} / \text{test}$.

Protocol

The cells were fixed with 70% ethanol (overnight at 4°C) 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.



Blank control: MCF7.

Primary Antibody (green line): Rabbit Anti-Cyclin E1 antibody (SL0573R)

Dilution: 2 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C.The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room



temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.