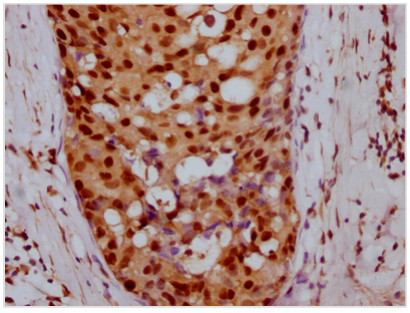
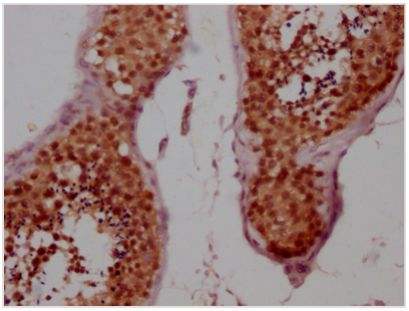
CCNE1 Antibody

Product Code	CSB-RA968740A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P24864
Immunogen	A synthesized peptide derived from human Cyclin E1
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF; Recommended dilution: IHC:1:50-1:200, IF:1:20-1:200
Relevance	Essential for the control of the cell cycle at the G1/S (start) transition.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer; Cell biology
Gene Names	CCNE1
Accession NO.	3A5

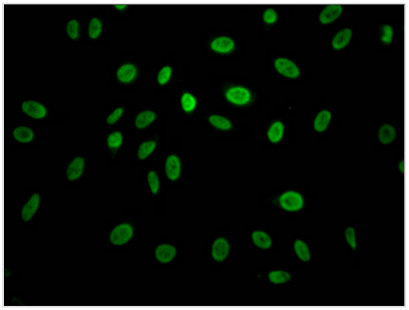
Image



IHC image of CSB-RA968740A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA968740A0HU diluted at 1:100 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of Hela Cells with CSB-RA968740A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

CCNE1 encodes cyclin E1, which drives the transition from G1 to S phase by binding and activation of CDK2, resulting in the initiation of DNA synthesis. Cyclin E1 thus promotes cell proliferation. Higher levels of cyclin E1 expression were found in high-grade carcinomas than in low-grade carcinomas. Cyclin E1 is one the most promising biomarkers in estrogen receptor-positive (ER+) breast cancer for response to the new standard of care drug class, CDK4/6 inhibitors. CCNE1 amplification or gain occurs in 20% of all high-grade serous ovarian cancer (HGSC) tumors and is associated with primary treatment resistance and reduced overall survival in HGSC. Previous studies suggested that the expression of cyclin E1 is negatively associated with anti-cancer drug sensitivity.

To produce this recombinant CCNE1 antibody, we needed to get the gene sequence of the antibody. B cell screening was used in the process. Once the sequence was obtained, it would be lead to the expression plasmids so that the CCNE1 antibody can be expressed in mammalian cells. Moreover, this recombinant CCNE1 antibody was validated in ELISA, IHC, IF.