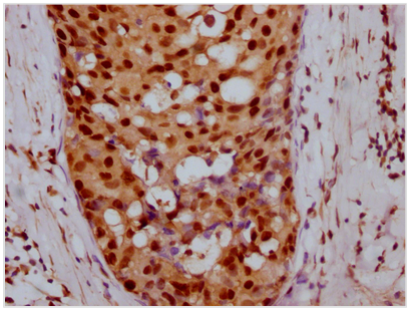
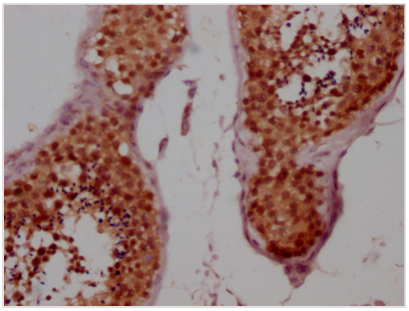
CCNE1 Recombinant Monoclonal Antibody

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
Clone No.	3A5

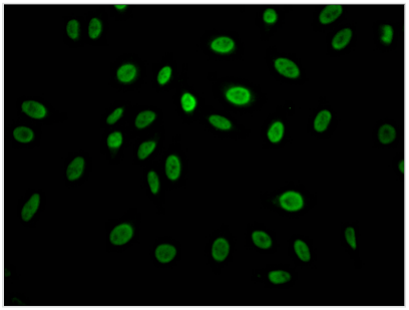
Image



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? 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? 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?. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The CCNE1 recombinant antibody production process involves four key steps: sequencing the CCNE1 monoclonal antibody gene, inserting the gene into a plasmid vector, transfecting the recombinant vector into a host cell line, and purifying the CCNE1 recombinant monoclonal antibody from the cell culture supernatant via affinity chromatography. The CCNE1 monoclonal antibody is derived from CCNE1 antibody-producing hybridomas, and the production process involves using a synthesized peptide from human CCNE1 as the immunogen. This CCNE1 recombinant monoclonal antibody is recommended for use in detecting human CCNE1 protein through ELISA, IHC, and IF applications.

The CCNE1 protein plays a critical role in the regulation of the cell cycle. It is a regulatory protein that binds to and activates cyclin-dependent kinase 2 (CDK2) to form a complex that is required for the progression of cells from the G1 to the S phase of the cell cycle. This complex phosphorylates various substrates, leading to DNA replication and cell division. The expression of CCNE1 is tightly regulated, with elevated levels of expression associated with various types of cancer. In addition to its role in the cell cycle, CCNE1 has also been implicated in DNA repair and apoptosis.