

Rabbit Cyclin B1 Polyclonal Antibody | anti-CCNB1 antibody

Phospho-Cyclin B1 (Ser128) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329802	Rabbit	Human, Mouse, Rat, Monkey Predicted Reactivity: Zebrafish (86%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (100%)	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Cyclin B1; Polyclonal Antibody; Phospho-Cyclin B1 (Ser128) Antibody; CCNB 1; CCNB; ccnb1; CCNB1_HUMAN; G2 mitotic specific cyclin B1; G2/mitotic-specific cyclin-B1; anti-CCNB1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey Predicted Reactivity: Zebrafish (86%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Cyclin B1 (Ser128) Antibody detects endogenous levels of Cyclin B1 only when phosphorylated at Ser128.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CCNB1 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Cyclin B1 around the phosphorylation site of Ser128.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Ubiquitinated by the SCF (NIP) complex during interphase, leading to its destruction. Not ubiquitinated during G2/M phases. Phosphorylated by PLK1 at Ser-133 on centrosomes during prophase: phosphorylation by PLK1 does not cause nuclear import. Phosphorylation at Ser-147 was also reported to be mediated by PLK1 but Ser-133 seems to be the primary phosphorylation site.
Subunit Structure	Interacts with the CDC2 protein kinase to form a serine/threonine kinase holoenzyme complex also known as maturation promoting factor (MPF). The cyclin subunit imparts substrate specificity to the complex. Binds HEI10. Interacts with catalytically active RALBP1 and CDC2 during mitosis to form an endocytotic complex during interphase. Interacts with CCNF; interaction is required for nuclear localization. Interacts with CDK5RAP3. Interacts with RFPL4A and UBE2A (By similarity). Interacts with INCA1.
Similarity	Belongs to the cyclin family. Cyclin AB subfamily.
Subcellular Location	Cytoplasm. Nucleus. Cytoplasm>Cytoskeleton>Microtubule organizing center>Centrosome.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry)

At 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

Staining Rat testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Cyclin B1 (Phospho-Ser128) using PI3-kinase H2O2 treated COS7 whole cell lysates.-/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-CCNB1 antibody	Essential for the control of the cell cycle at the G2/M (mitosis) transition.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	14327896
NCBI GeneID	891
NCBI Accession #	NP_114172.1
NCBI GenBank Nucleotide #	NM_031966.3
UniProt Accession #	P14635
Molecular Weight	48,337 Da
NCBI Official Full Name	G2/mitotic-specific cyclin-B1
NCBI Official Synonym Full Names	cyclin B1
NCBI Official Symbol	CCNB1
NCBI Official Synonym Symbols	CCNB
NCBI Protein Information	G2/mitotic-specific cyclin-B1; G2/mitotic-specific cyclin B1
UniProt Protein Name	G2/mitotic-specific cyclin-B1
UniProt Gene Name	CCNB1
UniProt Synonym Gene Names	CCNB
UniProt Entry Name	CCNB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.