

#### DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse Cyclin B1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Cyclin B1 Met1-Pro91 Accession # P14635
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

Cyclin B1 (also CCNB1 and G2/mitotic-specific cyclin-B1) is a member of the cyclin AB subfamily, cyclin family of proteins. Although its predicted MW is 50 kDa, it runs anomalously at 62 kDa in SDS-PAGE. Cyclin B1 associates with both CDK1 and 2 providing substrate specificity to a phosphorylating complex. A phosphor-CDK1:Cyclin B1 complex is inactive and cytosolic during interphase. At the beginning of mitosis, CDK1 is dephosphorylated and activated, and the CDK1:Cyclin B1 complex initiates formation of the mitotic scaffold. Human Cyclin B1 is 433 amino acids (aa) in length. It contains two cyclin box folds (aa 201-290 and 298-383) and two substrate binding sites (aa 298-342 and 343-380). Phosphorylation occurs at Ser9, Ser35, Ser69, and Thr321. There is one potential alternative start site at Met252 and deletions of aa 363-399 and 365-433. Over aa 1-91, human Cyclin B1 shares 63% aa identity with mouse Cyclin B1.

#### PRODUCT SPECIFIC NOTICES

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