# Human/Mouse Cyclin B1 Alexa Fluor® 594-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF6000T
100 µg

## DESCRIPTION

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| **Species Reactivity** | Human/Mouse |
| **Specificity** | Detects human and mouse Cyclin B1 in direct ELISAs and Western blots. |
| **Source** | Polyclonal Goat IgG |
| **Purification** | Antigen Affinity-purified |
| **Immunogen** | *E. coli*-derived recombinant human Cyclin B1<br>Met1-Pro91<br>Accession # P14635 |
| **Conjugate** | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm |
| **Formulation** | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.*

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| **Western Blot** | Optimal dilution of this antibody should be experimentally determined. |
| **Immunohistochemistry** | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

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| **Shipping** | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| **Stability & Storage** | 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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