

## DESCRIPTION

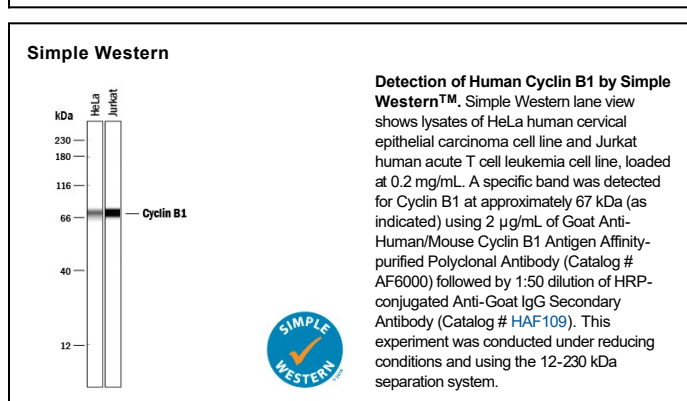
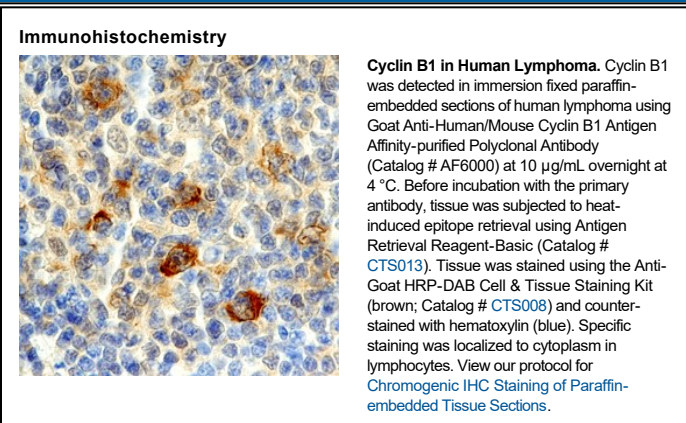
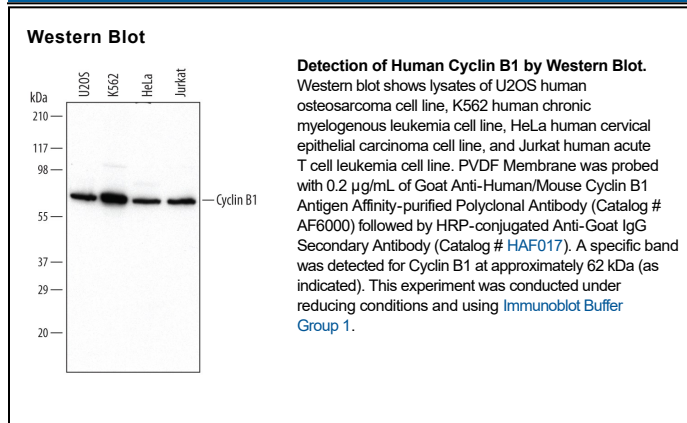
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse Cyclin B1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Cyclin B1 Met1-Pro91 Accession # P14635
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.2 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	2 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.