

## DESCRIPTION

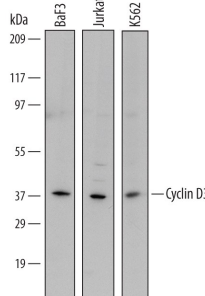
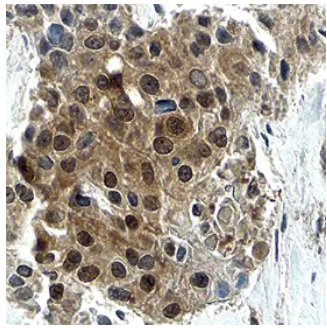
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Cyclin D3 in direct ELISAs. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human (rh) Cyclin B1 and D1 is observed. No cross-reactivity with rhCyclin A1, A2, B2, C, D2, E1, or E2 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 588726
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E.coli</i> -derived recombinant human Cyclin D3 Met1-Leu292 Accession # P30281
<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 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>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human and Mouse Cyclin D3 by Western Blot.</b> Western blot shows lysates of BaF3 mouse pro-B cell line, Jurkat human acute T cell leukemia cell line, and K562 human chronic myelogenous leukemia cell line. PVDF Membrane was probed with 1 µg/mL of Human Cyclin D3 Monoclonal Antibody (Catalog # MAB6570) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Cyclin D3 at approximately 37 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Cyclin D3 in Human Breast Cancer Tissue.</b> Cyclin D3 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Human Cyclin D3 Monoclonal Antibody (Catalog # MAB6570) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei and cytoplasm. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<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 D3 is a 37 kDa cell cycle regulatory protein whose expression level and nuclear/cytoplasmic distribution are tightly regulated in synchrony with the cell cycle. Cyclin D3 complexes containing Cdk4 or Cdk6 induce phosphorylation of Rb, a requirement for progression through the G1/S cell cycle transition. Human Cyclin D3 shares 95% and 93% amino acid sequence identity with mouse and rat Cyclin D3, respectively.