

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cyclin B2 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Cyclin B2 Met1-Lys101 Accession # O95067
Formulation	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
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p> <p>Detection of Human Cyclin B2 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line. Gels were loaded with 30 µg of whole cell lysate (WCL), 20 µg of cytoplasmic (Cyto), and 10 µg of nuclear extracts (Nuc). PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human Cyclin B2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6204) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Cyclin B2 at approximately 48-54 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p> <p>Cyclin B2 in Human Colon. Cyclin B2 was detected in immersion fixed paraffin-embedded sections of human colon using Sheep Anti-Human Cyclin B2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6204) 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-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to epithelial cells in mucosal glands. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Cyclin B2 (also CCNB2 and G2/mitotic-specific cyclin-B2) is a 48-54 kDa member of the Cyclin AB subfamily, cyclin family of proteins. It is widely expressed and associates with CDK1 providing substrate specificity to a phosphorylating complex. A phosphorCDK1:Cyclin B2 complex is associated with the Golgi apparatus, where it contributes to Golgi fragmentation during mitosis. It is also possible that Cyclin B2 can substitute for Cyclin B1 during the early stages of mitosis. Human Cyclin B2 is 398 amino acids (aa) in length. It contains two cyclin box folds (aa 201-290 and 298-383) and two substrate binding sites (aa 165-254 and 264-347). Phosphorylation occurs at Ser92, Thr94, Ser99, Ser204, Ser392 and Ser398. Over aa 1-101, human Cyclin B2 shares 79% aa identity with mouse Cyclin B2.