

## DESCRIPTION

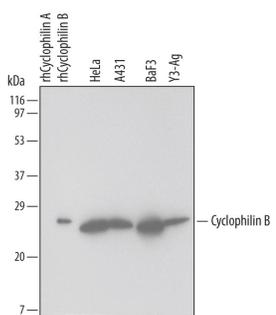
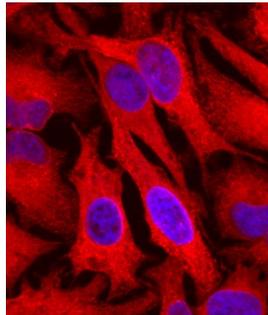
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat Cyclophilin B in Western blots. In Western blots and direct ELISAs, less than 1% cross-reactivity with recombinant human Cyclophilin A is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Cyclophilin B Asp34-Glu216 Accession # P23284
<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>Immunocytochemistry</b>	5-15 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human/Mouse/Rat Cyclophilin B by Western Blot.</b> Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, A431 human epithelial carcinoma cell line, BaF3 mouse pro-B cell line, and Y3-Ag rat myeloid cell line. PVDF membrane was probed with 1 µg/mL Goat Anti-Human/Mouse/Rat Cyclophilin B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5410) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). For additional reference, recombinant human Cyclophilin A and Cyclophilin B (5 ng/lane) were included. A specific band for Cyclophilin B was detected at approximately 24 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>Cyclophilin B in HeLa Human Cell Line.</b> Cyclophilin B was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Goat Anti-Human/Mouse/Rat Cyclophilin B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5410) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the Northern-Lights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>
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## 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

Cyclophilin B (SCYLP, CyPB and peptidyl-prolyl cis-trans isomerase B) is a 24 kDa glycoprotein member of the B subfamily of the cyclophilin-type PPIase family of molecules. It is both secreted and retained in the ER. When secreted, it mediates chemotaxis and T cell adhesion to fibronectin. This is likely due to its prolyl cis/trans isomerase activity. Intracellularly, Cyclophilin B appears to serve as a molecular chaperone for molecules destined for secretion. It does so via stabilization, and facilitating the activity of additional chaperones. The human CyPB precursor is 216 amino acids (aa) in length. It contains a 25 aa signal sequence plus a 191 aa mature region. There is a partial heparin-binding sequence (aa 27-34), a PPIase domain (aa 47-204) and a C-terminal ER retention motif (aa 213-216). Over aa 34-216, the human and mouse sequences are 95% aa identical.