

**DESCRIPTION**

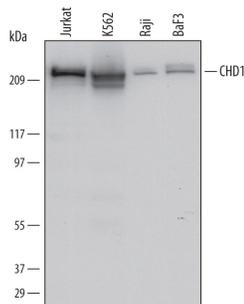
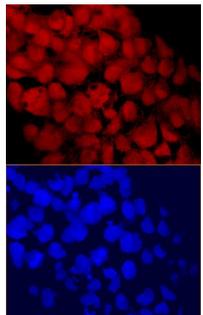
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CHD1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human CHD1L, 5, or 7 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 677616
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CHD1 Lys1531-Thr1710 Accession # O14646
<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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Human and Mouse CHD1 by Western Blot.</b> Western blot shows lysates of Jurkat human acute T cell leukemia cell line, K562 human chronic myelogenous leukemia cell line, Raji human Burkitt's lymphoma cell line, and Baf3 mouse pro-B cell line. PVDF Membrane was probed with 0.5 µg/mL of Human CHD1 Monoclonal Antibody (Catalog # MAB6195) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for CHD1 at approximately 220 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>CHD1 in BG01V Human Stem Cells.</b> CHD1 was detected in immersion fixed BG01V human embryonic stem cells using Human CHD1 Monoclonal Antibody (Catalog # MAB6195) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. 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>	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**

CHD1 (Chromohelicase/ATPase DNA-binding protein 1) is a 200-205 kDa member of the SNF2/RAD54 helicase family of proteins. It is an ATP-dependent chromatin remodeling factor that helps maintain chromatin in a transcriptionally active state. In embryonic stem cells, CHD1 associates with the promoters of active genes, a condition that is associated with open chromatin and pluripotency. Human CHD1 is 1710 amino acids (aa) in length. It contains two Ser-rich regions (aa 1-70 and 117-137), two Chromo (chromatin-organizer-modifier) domains (aa 272-364 and 389-452), a SNF2 family N-terminal domain (aa 484-763) and a C-terminal helicase domain (aa 792-943). There are at least 30 Ser/Thr phosphorylation sites. Over aa 1531-1710, human CHD1 shares 92% aa identity with mouse CHD1.