

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse CHD1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human CHD5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CHD1 Lys1531-Thr1710 Accession # O14646
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

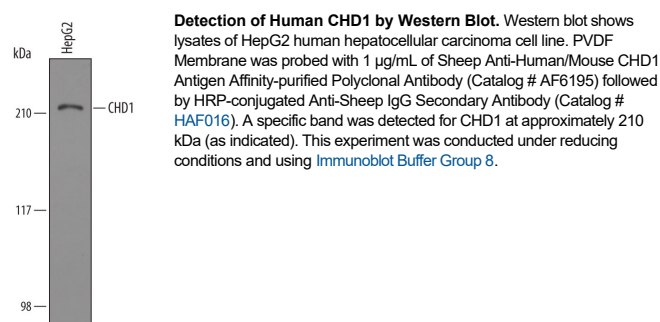
APPLICATIONS

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.

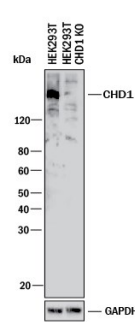
	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Knockout Validated	CHD1 is specifically detected in HEK293T human embryonic kidney parental cell line but is not detectable in CHD1 knockout HEK293T cell line.	

DATA

Western Blot



Knockout Validated



Western Blot Shows Human CHD1 Specificity by Using Knockout Cell Line. Western blot shows lysates of HEK293T human embryonic kidney parental cell line and CHD1 knockout HEK293T cell line (KO). PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse CHD1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6195) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CHD1 at approximately 210 kDa (as indicated) in the parental HEK293T cell line, but is not detectable in knockout HEK293T cell line. GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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

CHD1 (Chromohelicase/ATPase DNA-binding protein 1) is a 200-220 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.