

DESCRIPTION

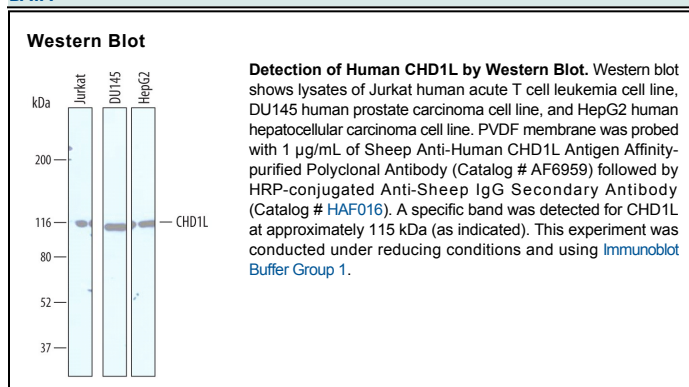
Species Reactivity	Human
Specificity	Detects human CHD1L in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant human (rh) CHD1 and rhCHD5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CHD1L Arg759-Lys879 Accession # Q86WJ1
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

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

CHD-1L (Chromohelicase/ATPase DNA-binding protein 1-Like; also ALC-1) is a 98-118 kDa member of the SNF2/RAD54 helicase family of proteins. It is expressed in hepatocytes, possesses ATPase activity, and likely promotes chromatin remodeling at sites of DNA damage. It also is considered an oncogene. CHD-1L upregulates ARHGEF9 transcription, an action that promotes Cdc42 activity with accompanying filopodia formation and EMT. It also binds apoptosis-mediating Nur77, blocking its migration from nucleus-to-mitochondria. Human CHD-1L is 897 amino acids (aa) in length. It contains a helicase ATP-binding domain (aa 58-223), a C-terminal helicase domain (aa 351-513), a coiled-coil region (aa 38-675) and one Macro domain that binds poly-ADP-ribose and targets DNA damage sites (aa 704-897). There are at least two Ser/Thr phosphorylation sites. There are multiple potential splice variants. One isoform contains an alternative start site at Met114, a second isoform possesses a deletion of aa 43-246, a third isoform shows a three aa substitution for aa 363-897, and a fourth isoform combines a 16 aa insertion after Arg386 with a five aa substitution for aa 425-897. Over aa 759-879, human CHD-1L shares 94% aa identity with mouse CHD-1L.