

CHD1L (2170C3a): sc-81065

BACKGROUND

CHD1L (chromodomain helicase DNA-binding protein 1-like) is an 897 amino acid protein encoded by the human gene CHD1L. The CHD family of proteins are ATP-dependent chromatin remodeling enzymes which combine chromodomains with SWI2/SNF2 ATPase/helicase motifs and DNA-binding capability. Chromodomains are protein regions of approximately 40-50 amino acid residues that are found in proteins associated with chromatin remodeling and manipulation. The domain is highly conserved among both plants and animals and is found in a large variety of proteins from many genomes. CHD1L and CHD1 share most homology within two internal helicase domains.

REFERENCES

1. Stokes, D.G. and Perry, R.P. 1995. DNA-binding and chromatin localization properties of CHD1. *Mol. Cell. Biol.* 15: 2745-2753.
2. Woodage, T., Basrai, M.A. and Baxeavanis, A.D. 1997. Characterization of the CHD family of proteins. *Proc. Natl. Acad. Sci. USA* 94: 11472-11477.
3. Kelley, D.E., Stokes, D.G. and Perry, R.P. 1999. CHD1 interacts with SSRP1 and depends on both its chromodomain and its ATPase/helicase-like domain for proper association with chromatin. *Chromosoma* 108: 10-25.
4. Tai, H.H., Geisterfer, M. and Bell, J.C. 2003. CHD1 associates with NCoR and histone deacetylase as well as with RNA splicing proteins. *Biochem. Biophys. Res. Commun.* 308: 170-176.
5. Sims, R.J., Chen, C.F. and Santos-Rosa, H. 2006. Human but not yeast CHD1 binds directly and selectively to Histone H3 methylated at Lysine 4 via its tandem chromodomains. *J. Biol. Chem.* 280: 41789-41792.
6. Flanagan, J.F., Mi, L.Z. and Chruszcz, M. 2006. Double chromodomains cooperate to recognize the methylated Histone H3 tail. *Nature* 438: 1181-1185.

CHROMOSOMAL LOCATION

Genetic locus: CHD1L (human) mapping to 1q21.1.

SOURCE

CHD1L (2170C3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the C-terminus of CHD1L of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

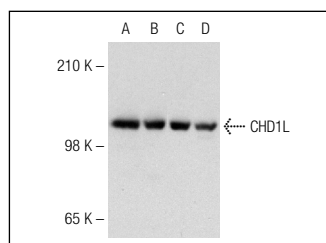
CHD1L (2170C3a) is recommended for detection of CHD1L of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for CHD1L siRNA (h): sc-78807, CHD1L shRNA Plasmid (h): sc-78807-SH and CHD1L shRNA (h) Lentiviral Particles: sc-78807-V.

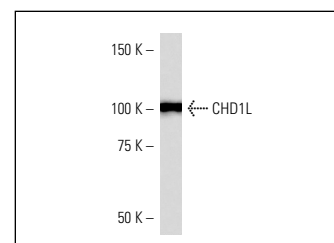
Molecular Weight of CHD1L isoforms: 101/90/78/88 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, Jurkat nuclear extract: sc-2132 or U-937 nuclear extract: sc-2156.

DATA



CHD1L (2170C3a): sc-81065. Western blot analysis of CHD1L expression in Hep G2 (A), U-937 (B), Jurkat (C) and A549 (D) nuclear extracts.



CHD1L (2170C3a): sc-81065. Western blot analysis of CHD1L expression in HEK293 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.