

# Chromodomain Helicase DNA-Binding (CHD) Family Antibody Sampler Kit



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
CHD1 (D8C2) Rabbit mAb	4351	40 µl	220 kDa	Rabbit IgG
CHD2 Antibody	4170	40 µl	260 kDa	Rabbit
CHD3 Antibody	4241	40 µl	260 kDa	Rabbit
CHD4 (D8B12) Rabbit mAb	11912	40 µl	260 kDa	Rabbit IgG
CHD7 (D3F5) Rabbit mAb	6505	40 µl	336 kDa	Rabbit IgG
CHD8 (D3C1) Rabbit mAb	11891	40 µl	290 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit [cellsignal.com](http://cellsignal.com) for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

## Description

The Chromodomain Helicase DNA-Binding (CHD) Family Antibody Sampler Kit provides an economical means to investigate the CHD family members associated with the histone deacetylase NuRD complex. This kit contains enough primary antibody to perform four western blots per primary antibody.

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

## Background

Chromodomain-helicase-DNA-binding domain (CHD) proteins have been identified in a variety of organisms (1,2). This family of nine proteins is divided into three separate subfamilies: subfamily I (CHD1 and CHD2), subfamily II (CHD3 and CHD4), and subfamily III (CHD5, CHD6, CHD7, CHD8, and CHD9). All CHD proteins contain two tandem amino-terminal chromodomains, a SWI/SNF-related ATPase domain, and a carboxy-terminal DNA-binding domain (1,2). The chromodomains facilitate binding to methylated lysine residues of histone proteins and confer interactions with specific regions of chromatin. The SWI/SNF-related ATPase domain utilizes energy from ATP hydrolysis to modify chromatin structure. CHD proteins are often found in large, multiprotein complexes with their transcriptional activation or repression activity governed by other proteins within the complex. CHD3 (also known as Mi2- $\alpha$ ) and CHD4 (also known as Mi2- $\beta$ ) are central components of the nucleosome remodeling and histone deacetylase (NuRD) transcriptional repressor complex, which also contains HDAC1, HDAC2, RBAP48, RBAP46, MTA1, MTA2, MTA3, and MBD3 (3-8). Both CHD3 and CHD4 contain two plant homeodomain (PHD) zinc finger domains that bind directly to HDAC1 and HDAC2.

## Background References

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