Revision 1

Store at -20C

#11891

CHD8 (D3C1) Rabbit mAb

Cell Signaling TECHNOLOGY®

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

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	290	Rabbit IgG	#Q9HCK8	57680

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

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.

Specificity/Sensitivity

CHD8 (D3C1) Rabbit mAb recognizes endogenous levels of total CHD8 protein. This antibody also cross-reacts with a protein of unknown origin at 140 kDa.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a recombinant protein specific to the carboxy terminus of human CHD8 protein.

Background

CHD8 belongs to the chromodomain helicase DNA-binding (CHD) family of ATP-dependent chromatin remodeling proteins (1). The CHD family of proteins has been shown to play an important role in regulating gene expression by utilizing the energy derived from ATP hydrolysis to alter chromatin architecture (1,2). The nine CHD family members are characterized by the presence of two tandem chromodomains in the N-terminal region and an SNF2-like ATPase domain near the central region of the protein (2-4). In addition, CHD8 contains three CR (conserved region) domains, a SANT (switching-defective protein 3, adaptor 2, nuclear receptor co-repressor, transcription factor IIB)-like domain, two BRK (brahma and kismet) domains, and a DNA-binding domain (2). The chromatin remodeling activity of CHD8 has been shown to be important for the regulation of a wide variety of genes, such as the HOX genes (5) and genes that are driven by β-catenin (6), p53 (7), estrogen receptor (8), or androgen receptor (9). CHD8 can also interact with the insulator binding protein CTCF and is required for CTCF insulator activity at multiple gene loci (10).

Background References

1. Hargreaves, D.C. and Crabtree, G.R. (2011) *Cell Res* 21, 396-420.
2. Marfella, C.G. and Imbalzano, A.N. (2007) *Mutat Res* 618, 30-40.
3. Delmas, V. et al. (1993) *Proc Natl Acad Sci U S A* 90, 2414-8.
4. Woodage, T. et al. (1997) *Proc Natl Acad Sci U S A* 94, 11472-7.
5. Yates, J.A. et al. (2010) *FEBS Lett* 584, 689-93.
6. Thompson, B.A. et al. (2008) *Mol Cell Biol* 28, 3894-904.
7. Nishiyama, M. et al. (2009) *Nat Cell Biol* 11, 172-82.
8. Caldon, C.E. et al. (2009) *Mol Cell Biol* 29, 4623-39.
9. Menon, T. et al. (2010) *Mol Endocrinol* 24, 1165-74.
10. Ishihara, K. et al. (2006) *Mol Cell* 23, 733-42.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

Trademarks and Patents

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.