

**#8684** Store at -20°C

## CtBP1 (D2D6) 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:
WB, IP, IHC-P, IF-IC	H M Mk	Endogenous	47	Rabbit IgG	#Q13363	1487

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:100  
1:100  
1:200

### 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

CtBP1 (D2D6) Rabbit mAb recognizes endogenous levels of total CtBP1 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human CtBP1 protein.

### Background

CtBP1 (C-terminal binding protein 1) was first recognized as a cellular factor that interacts with the C-terminal portion of adenovirus E1A, a protein involved in the transcriptional regulation of key cellular genes (1). CtBP1 is able to regulate gene activity through its intrinsic dehydrogenase activity (2,3) and by interacting with Polycomb Group (PcG) proteins during development (4). Along with its homologue, CtBP2, it acts as a transcriptional corepressor of zinc-finger homeodomain factor deltaEF1 to regulate a wide range of cellular processes through transrepression mechanisms (5). Through its direct interaction with PRDM16, CtBP1 has been shown to be involved in brown adipose tissue differentiation by mediating the repression of white fat genes and directing differentiation toward the brown fat gene program (6). CtBP1 also plays a role in lipid metabolic pathways and membrane fission by regulating the fission machinery operating Golgi tubular networks (7). CtBP1 has recently been shown to repress transcription of BRCA1 via a redox regulated mechanism (8). Furthermore, it is thought that downregulation of BRCA1 and E-cadherin in invasive ductal breast carcinoma correlates directly with activation of CtBP1 (9).

### Background References

- Schaeper, U. et al. (1995) *Proc Natl Acad Sci USA* 92, 10467-71.
- Balasubramanian, P. et al. (2003) *FEBS Lett* 537, 157-60.
- Kumar, V. et al. (2002) *Mol Cell* 10, 857-69.
- Sewalt, R.G. et al. (1999) *Mol Cell Biol* 19, 777-87.
- Furusawa, T. et al. (1999) *Mol Cell Biol* 19, 8581-90.
- Kajimura, S. et al. (2008) *Genes Dev* 22, 1397-409.
- Cassens, U. et al. (1999) *Transfus Med* 9, 311-20.
- Deng, Y. et al. (2010) *Oncogene* 29, 6603-8.
- Deng, Y. et al. (2011) *Mol Carcinog*, Epub ahead of print.

### 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

**WB:** Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)  
**IF-IC:** Immunofluorescence (Immunocytochemistry)

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

**Trademarks and Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](https://cellsignal.com/trademarks) for more information.

**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.