

# β-Catenin (D10A8) XP® Rabbit mAb (PE Conjugate)

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Entrez-Gene ID #1499  
UniProt ID #P35222

rev. 09/19/18

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity*	Isotype
F Endogenous	H, M, R, Mk, (Z, B, Pg, Hr, Guinea Pig)	Rabbit IgG

**Description:** This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometry analysis in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated β-Catenin (D10A8) XP® Rabbit mAb #8480.

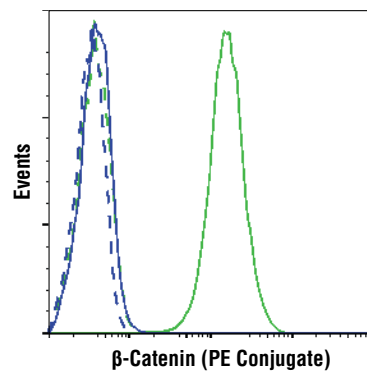
**Background:** β-Catenin is a key downstream effector in the Wnt signaling pathway (1). It is implicated in two major biological processes in vertebrates: early embryonic development (2) and tumorigenesis (3). CK1 phosphorylates β-catenin at Ser45. This phosphorylation event primes β-catenin for subsequent phosphorylation by GSK-3β (4-6). GSK-3β destabilizes β-catenin by phosphorylating it at Ser33, Ser37, and Thr41 (7). Mutations at these sites result in the stabilization of β-catenin protein levels and have been found in many tumor cell lines (8).

**Specificity/Sensitivity:** β-Catenin (D10A8) XP® Rabbit mAb (PE Conjugate) recognizes endogenous levels of total β-catenin protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro714 of human β-catenin protein.

**Background References:**

- (1) Cadigan, K.M. and Nusse, R. (1997) *Genes Dev* 11, 3286-305.
- (2) Wodarz, A. and Nusse, R. (1998) *Annu Rev Cell Dev Biol* 14, 59-88.
- (3) Polakis, P. (1999) *Curr Opin Genet Dev* 9, 15-21.
- (4) Amit, S. et al. (2002) *Genes Dev* 16, 1066-76.
- (5) Liu, C. et al. (2002) *Cell* 108, 837-47.
- (6) Yanagawa, S. et al. (2002) *EMBO J* 21, 1733-42.
- (7) Yost, C. et al. (1996) *Genes Dev* 10, 1443-54.
- (8) Morin, P.J. et al. (1997) *Science* 275, 1787-90.



Flow cytometric analysis of NCI-H28 cells (blue) and Hela cells (green) using β-Catenin (D10A8) XP® Rabbit mAb (PE Conjugate) (solid lines) or a concentration-matched Rabbit (DA1E) mAb IgG XP® Isotype Control (PE Conjugate) #5742 (dashed lines).

**Storage:** Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibodies. Protect from light. Do not freeze.

\*Species cross-reactivity is determined by western blot using the unconjugated antibody.

**Recommended Antibody Dilutions:**

Flow Cytometry 1:50

For product specific protocols and a complete listing of recommended companion products please see the product web page at [www.cellsignal.com](http://www.cellsignal.com).

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