

β-Catenin Blocking Peptide



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

Support ■ 877-678-TECH (8324)
info@cellsignal.com

Web ■ www.cellsignal.com

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Description: This peptide is used to block β-Catenin (6B3) Rabbit mAb #9582 reactivity in peptide dot blot protocols.

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

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks β-Catenin (6B3) Rabbit mAb #9582 by peptide dot blot.

Directions For Use: Recommended antibody dilutions can be found on the relevant product data sheet.

Background References:

- (1) Cadigan, K.M. and Nusse, R. (1997) *Genes Dev.* 11, 3286–3305.
- (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, 1066–1076.
- (5) Lin, C. et al. (2002) *Cell* 108, 837–847.
- (6) Yanagawa, S. et al. (2002) *EMBO J.* 21, 1742.
- (7) Yost, C. et al. (1996) *Genes Dev.* 10, 1443–1454.
- (8) Morin, P.J. (1997) *Science* 275, 1787–1790.

Storage: Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. 1% DMSO Store at -20°C.