Store at -20C

β-Catenin Antibody Sampler Kit



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LO

1 Kit (5 x 20 microliters)

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

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
β-Catenin (D10A8) XP [®] Rabbit mAb	8480	20 µl	92 kDa	Rabbit IgG
Phospho-β-Catenin (Ser33/37/Thr41) Antibody	9561	20 µl	92 kDa	Rabbit
Phospho-β-Catenin (Thr41/Ser45) Antibody	9565	20 µl	92 kDa	Rabbit
Phospho-β-Catenin (Ser552) (D8E11) Rabbit mAb	5651	20 µl	92 kDa	Rabbit IgG
Phospho-β-Catenin (Ser675) (D2F1) XP [®] Rabbit mAb	4176	20 µl	92 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The β -Catenin Antibody Sampler Kit provides an economical means of detecting total β -catenin as well as β -catenin phosphorlylated at various residues. The kit contains enough primary and secondary antibody to perform two Western blots with each antibody.

Storage

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

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-3 β (4-6). GSK-3 β 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).

Both Akt and PKA were shown to phosphorylate β -catenin at Ser552 and Ser675. Phosphorylation at Ser552 and Ser675 induces β -catenin accumulation in the nucleus and increases its transcriptional activity (9-12).

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, 1066-76.
- 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.
- 9. Taurin, S. et al. (2006) J. Biol. Chem. 281, 9971-9976.
- 10. Fang, D. et al. (2007) J. Biol. Chem. 282, 11221-11229.
- 11. He, X.C. et al. (2007) Nat. Genet. 39, 189-198.
- 12. Hino, S. et al. (2005) Mol. Cell Biol. 25, 9063-9072.

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