# #2951 Store at -20°C

## **β-Catenin Antibody Sampler Kit**



Orders:

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

Support:

877-678-TECH (8324)

1 Kit (5 x 20 microliters)

Web: info@cellsignal.com

cellsignal.com

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

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

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

### **Description**

The  $\beta$ -Catenin Antibody Sampler Kit provides an economical means of detecting total  $\beta$ -catenin as well as  $\beta$ -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  $-20^{\circ}$ C. Do not aliquot the antibody.

### **Background**

 $\beta$ -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  $\beta$ -catenin at Ser45. This phosphorylation event primes  $\beta$ -catenin for subsequent phosphorylation by GSK-3 $\beta$  (4-6). GSK-3 $\beta$  destabilizes  $\beta$ -catenin by phosphorylating it at Ser33, Ser37, and Thr41 (7). Mutations at these sites result in the stabilization of  $\beta$ -catenin protein levels and have been found in many tumor cell lines (8).

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

### Background References

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