Phospho-β-Catenin (Ser33/37/Thr41) Antibody

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, 37 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).

Specificity/Sensitivity: Phospho-β-Catenin (Ser33/37/Thr41) Antibody detects endogenous levels of β-catenin only when phosphorylated at serines 33, 37 or threonine 41. It does not recognize β-catenin phosphorylated at other sites.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser33, Ser37 and Thr41 of human β-catenin. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Recommended Antibody Dilutions:
Western blotting 1:1000
For application specific protocols please see the web page for this product at www.cellsignal.com.

Important: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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