β-Catenin Antibody

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

Product Usage Information

<table>
<thead>
<tr>
<th>Application</th>
<th>Dilution</th>
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</thead>
<tbody>
<tr>
<td>Western Blotting</td>
<td>1:1000</td>
</tr>
<tr>
<td>Immunoprecipitation</td>
<td>1:100</td>
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<tr>
<td>Immunohistochemistry (Paraffin)</td>
<td>1:400</td>
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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.

Specificity / Sensitivity

β-Catenin Antibody detects endogenous levels total of β-catenin. This antibody does cross-react with endogenous levels of γ-catenin.

Species Reactivity:

Human, Mouse, Rat, Monkey

Species predicted to react based on 100% sequence homology:

Zebrafish, Pig

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues around Ser37 of human β-catenin. Antibodies are purified by protein A and peptide affinity chromatography.

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).