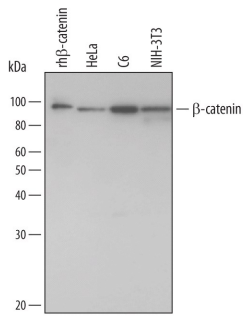
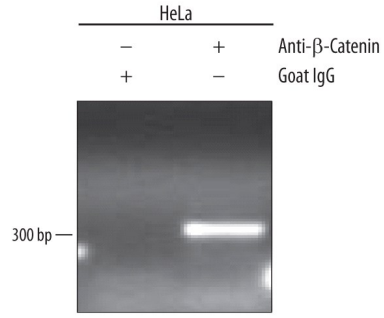
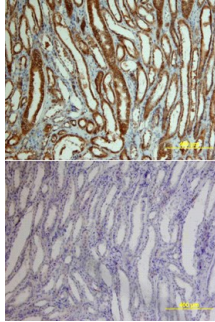


DESCRIPTION	
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse and rat $\beta$ -Catenin in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human $\beta$ -Catenin Ala2-Leu781 Accession # P35222
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

APPLICATIONS		
<b>Please Note:</b> Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
<b>Western Blot</b>	1 $\mu$ g/mL	See Below
<b>Chromatin Immunoprecipitation (ChIP)</b>	5 $\mu$ g/5 x 10 <sup>6</sup> cells	See Below
<b>Immunohistochemistry</b>	5-15 $\mu$ g/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	2.5 $\mu$ g/10 <sup>6</sup> cells	See Below
<b>Simple Western</b>	50 $\mu$ g/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

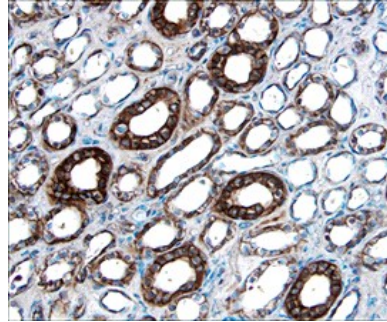
DATA	
<p><b>Western Blot</b></p>  <p><b>Detection of Human/Mouse/Rat <math>\beta</math>-Catenin by Western Blot.</b> Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, C6 rat glioma cell line, and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 1 <math>\mu</math>g/mL Goat Anti-Human/Mouse/Rat <math>\beta</math>-Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). For additional reference, recombinant human <math>\beta</math>-catenin (1 ng) was included. A specific band for beta-Catenin was detected at approximately 95 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Chromatin Immunoprecipitation (ChIP)</b></p>  <p><b>Detection of <math>\beta</math>-Catenin-regulated Genes by Chromatin Immunoprecipitation.</b> HeLa human cervical epithelial carcinoma cell line were fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. <math>\beta</math>-Catenin/DNA complexes were immunoprecipitated using 5 <math>\mu</math>g Goat Anti-Human/Mouse/Rat <math>\beta</math>-Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 <math>\mu</math>L of MagCelect Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The <i>SU(Z)12</i> promoter was detected by standard PCR.</p>

## Immunohistochemistry



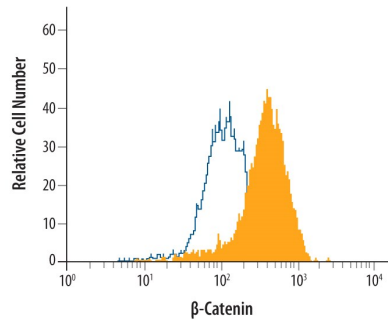
**$\beta$ -Catenin in Human Kidney Cancer Tissue.**  $\beta$ -Catenin was detected in immersion fixed paraffin-embedded sections of human kidney cancer tissue using Goat Anti-Human/Mouse/Rat  $\beta$ -Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) at 15  $\mu$ g/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## Immunohistochemistry



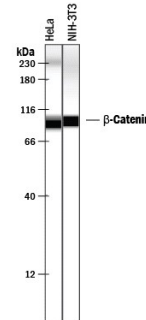
**$\beta$ -Catenin in Human Kidney Cancer Tissue.**  $\beta$ -Catenin was detected in immersion fixed paraffin-embedded sections of human kidney cancer tissue using 15  $\mu$ g/mL Goat Anti-Human/Mouse/Rat  $\beta$ -Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to epithelial cells in collecting tubules in the medulla. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## Intracellular Staining by Flow Cytometry



**Detection of  $\beta$ -Catenin in HeLa Human Cell Line by Flow Cytometry.** HeLa human cervical epithelial carcinoma cell line was stained with Goat Anti-Human/Mouse/Rat  $\beta$ -Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329, filled histogram) or control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0108). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

## Simple Western



**Detection of Human and Mouse  $\beta$ -Catenin by Simple Western™.** Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line and NIH-3T3 mouse embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for  $\beta$ -Catenin at approximately 94-97 kDa (as indicated) using 50  $\mu$ g/mL of Goat Anti-Human/Mouse/Rat  $\beta$ -Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

$\beta$ -Catenin is a cadherin-associated protein that is involved in the regulation of cell adhesion. It also acts as a transcriptional co-activator in the nucleus and is involved in the canonical Wnt signal transduction pathways.