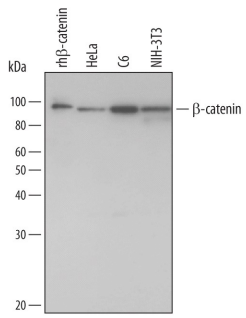
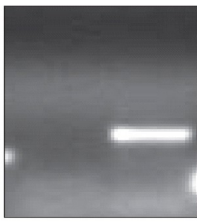
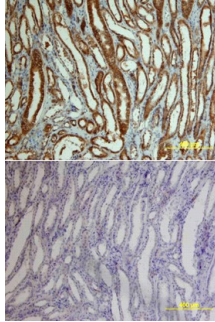


DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat β -Catenin in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human β -Catenin Ala2-Leu781 Accession # P35222
Formulation	Lyophilized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

APPLICATIONS		
Please Note: 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
Western Blot	1 μ g/mL	See Below
Chromatin Immunoprecipitation (ChIP)	5 μ g/5 x 10 ⁶ cells	See Below
Immunohistochemistry	5-15 μ g/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 μ g/10 ⁶ cells	See Below
Simple Western	50 μ g/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

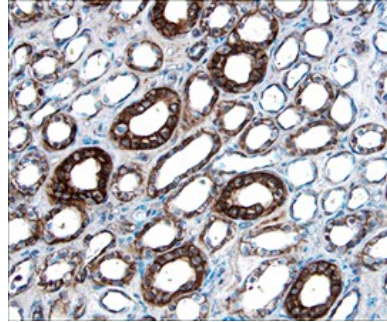
DATA	
<p>Western Blot</p>  <p>Detection of Human/Mouse/Rat β-Catenin by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, C6 rat glioma cell line, and NIH-3T3 mouse embryonic fibroblast cell line. PVDF membrane was probed with 1 μg/mL Goat Anti-Human/Mouse/Rat β-Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). For additional reference, recombinant human β-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>Chromatin Immunoprecipitation (ChIP)</p>  <p>Detection of β-Catenin-regulated Genes by Chromatin Immunoprecipitation. HeLa human cervical epithelial carcinoma cell line were fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. β-Catenin/DNA complexes were immunoprecipitated using 5 μg Goat Anti-Human/Mouse/Rat β-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 μL 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



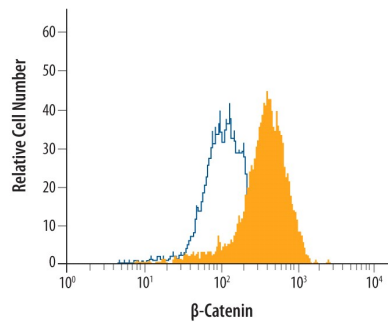
β -Catenin in Human Kidney Cancer Tissue. β -Catenin was detected in immersion fixed paraffin-embedded sections of human kidney cancer tissue using Goat Anti-Human/Mouse/Rat β -Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) at 15 μ g/mL overnight at 4 °C. Tissue was stained 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



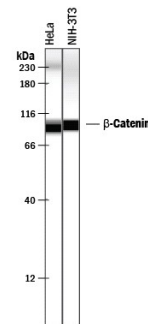
β -Catenin in Human Kidney Cancer Tissue. β -Catenin was detected in immersion fixed paraffin-embedded sections of human kidney cancer tissue using 15 μ g/mL Goat Anti-Human/Mouse/Rat β -Catenin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1329) overnight at 4 °C. Tissue was stained with 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 β -Catenin in HeLa Human Cell Line by Flow Cytometry. HeLa human cervical epithelial carcinoma cell line was stained with Goat Anti-Human/Mouse/Rat β -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 β -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 β -Catenin at approximately 94-97 kDa (as indicated) using 50 μ g/mL of Goat Anti-Human/Mouse/Rat β -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

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

β -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.