

DESCRIPTION

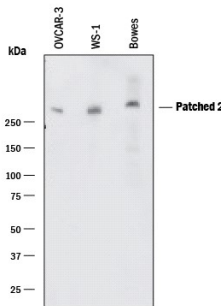
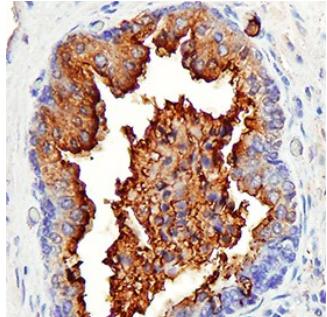
Species Reactivity	Human
Specificity	Detects human Patched 2/PTCH2 in direct ELISA and Western Blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 403438
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Patched 2/PTCH2 Glu79-Glu392 Accession # Q9Y6C5
Formulation	Lyophilized from a 0.2 µm 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 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Patched 2/PTCH2 by Western Blot. Western blot shows lysates of OVCAR-3 human ovarian carcinoma cell line, WS-1 human fetal skin fibroblast cell line, and Bowes human melanoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Patched 2/PTCH2 Monoclonal Antibody (Catalog # MAB4078) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Patched 2/PTCH2 at approximately 280 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Patched 2/PTCH2 in Human Cervical Cancer Tissue. Patched 2/PTCH2 was detected in immersion fixed paraffin-embedded sections of human cervical cancer tissue using Mouse Anti-Human Patched 2/PTCH2 Monoclonal Antibody (Catalog # MAB4078) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

Patched 2 (PTCH2) is a 180-200 kDa 12 transmembrane member of the Patched family. Human PTCH2 is 1203 amino acids (aa) in length. It has two terminal cytoplasmic domains, one between aa 1-57, and a second between aa 1115-1203. Together with Smoothened (SMO), PTCH2 forms a membrane complex that serves as a receptor for Sonic Hedgehog (SHH). Human PTCH2 likely has two isoforms. One shows an eight aa extension of the C-terminus, while a second shows a four aa substitution for the C-terminal 61 amino acids (aa 1143-1203). Over the first extracellular loop human PTCH2 shares 95% and 96% aa sequence identity with mouse and canine PTCH2, respectively.