

## DESCRIPTION

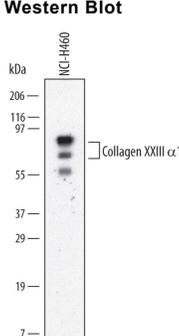
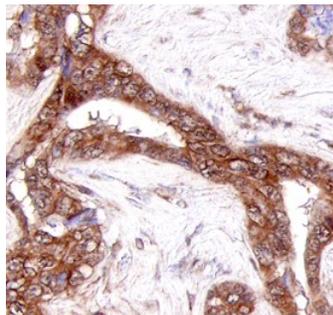
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Collagen XXIII $\alpha$ 1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, 50% cross-reactivity with recombinant human Collagen XXV $\alpha$ 1 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 468642
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Collagen XXIII $\alpha$ 1 Glu111-Lys540 Accession # NP_775736
<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

**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
<b>Western Blot</b>	2 $\mu$ g/mL	See Below
<b>Immunohistochemistry</b>	8-25 $\mu$ g/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human Collagen XXIII <math>\alpha</math>1 by Western Blot.</b> Western blot shows lysates of NCI-H460 human large cell lung carcinoma cell line. PVDF Membrane was probed with 2 <math>\mu</math>g/mL of Human Collagen XXIII <math>\alpha</math>1 Monoclonal Antibody (Catalog # MAB4165) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Specific bands were detected for Collagen XXIII <math>\alpha</math>1 at approximately 75 and 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Collagen XXIII <math>\alpha</math>1 in Human Adenocarcinoma.</b> Collagen XXIII <math>\alpha</math>1 was detected in immersion fixed paraffin-embedded sections of human adenocarcinoma using Human Collagen XXIII <math>\alpha</math>1 Monoclonal Antibody (Catalog # MAB4165) at 25 <math>\mu</math>g/mL overnight at 4 <math>^{\circ}</math>C. Tissue was stained using the Anti-Mouse HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
---	--

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 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 $^{\circ}$ C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 <math>^{\circ}</math>C as supplied.</li> <li>● 1 month, 2 to 8 <math>^{\circ}</math>C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 <math>^{\circ}</math>C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Collagen XXIII  $\alpha$ 1 (COL23A1) is an epithelial cell type 2 transmembrane glycoprotein with multiple collagen like domains in its extracellular region. Intracellular furin mediated cleavage of the 68 kDa molecule generates a 58 kDa shed fragment that forms disulfide linked trimers. An alternately spliced isoform consists of nearly 300 amino acids of the membrane proximal extracellular domain (ECD), flanked by substituted sequences. COL23A1 is upregulated in many transformed cell lines and serves as an indicator for tumor aggressiveness in prostate cancer. Within the ECD, human COL23A1 shares 89% aa sequence identity with mouse and rat COL23A1.