

#### DESCRIPTION

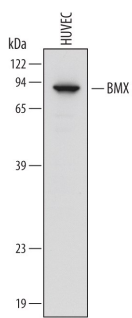
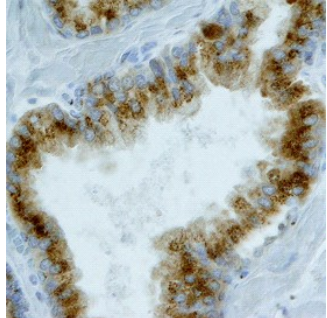
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human BMX in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human BMX Met1-Gln215 Accession # P51813
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

#### DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human BMX by Western Blot.</b> Western blot shows lysates of HUVEC human umbilical vein endothelial cells. PVDF membrane was probed with 1 µg/mL of Human BMX Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5887) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for BMX at approximately 80 kDa (as indicated). This experiment was conducted under reducing conditions and using <a href="#">Immunoblot Buffer Group 1</a>.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>BMX in Human Prostate.</b> BMX was detected in immersion fixed paraffin-embedded sections of human prostate using Human BMX Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5887) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of epithelial cells. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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#### 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>	<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 °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

BMX (Bone marrow tyrosine kinase gene in chromosome X protein; also ETK and NTK38) is a 76-85 kDa member of the TEC subfamily, Tyr protein kinase family of enzymes. It is a cytoplasmic endothelial and epithelial cell kinase that induces STAT phosphorylation in a Jak-independent manner, and regulates cytokine production via mRNA stabilization. Human BMX is 675 amino acids (aa) in length. It contains one PH domain whose ligation induces activation (aa 6-109), a zinc-finger region (aa 113-149), two autophosphorylation sites at Tyr216 and Tyr224, an SH3 and SH2 domain (aa 213-392) and a kinase catalytic site (aa 417-675). BMX undergoes proteolysis by caspase 3 to generate a 35 kDa N-terminal (aa 1-242) fragment, and a 50 kDa C-terminal (aa 243-675) fragment with enhanced kinase activity.