

#### DESCRIPTION

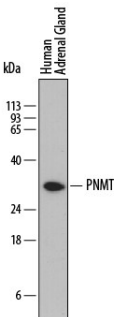
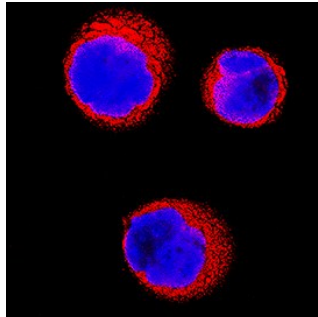
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human PNMT in direct ELISAs and Western blots. In direct ELISAs, less than 4% cross-reactivity with recombinant human (rh) INMT and rhNNMT is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PNMT Ser2-Leu282 Accession # P11086
<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>Immunocytochemistry</b>	5-15 µg/mL	See Below

#### DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human PNMT by Western Blot.</b> Western blot shows lysates of human adrenal gland tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human PNMT Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7854) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PNMT at approximately 30 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>PNMT in K562 Human Cell Line.</b> PNMT was detected in immersion fixed K562 human chronic myelogenous leukemia cell line using Sheep Anti-Human PNMT Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7854) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>
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#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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

PNMT (Phenylethanolamine N-Methyltransferase; also PENT and Noradrenaline N-methyltransferase) is a monomeric, 30-34 kDa cytoplasmic member of the NNMT/PNMT/TEMT family of enzymes. It has limited expression, being found in Leydig, skeletal muscle and B cells, adrenal chromaffin cells, select adrenergic neurons of the vagus nerve, periventricular grey and reticular formation, and specialized adrenalin-containing cells contained within the heart. PNMT converts noradrenalin into adrenalin by transferring a methyl group from AdoMet to the terminal amine group of noradrenalin. Human PNMT is 282 amino acids (aa) in length and contains an active enzyme site between aa 14-279. Full length human PNMT1 shares 81% aa sequence identity with mouse PNMT.