

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PNMT Ser2-Leu282 Accession # P11086
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.

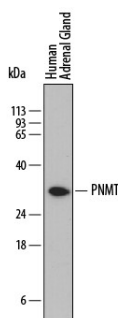
APPLICATIONS

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
Immunocytochemistry	5-15 µg/mL	See Below

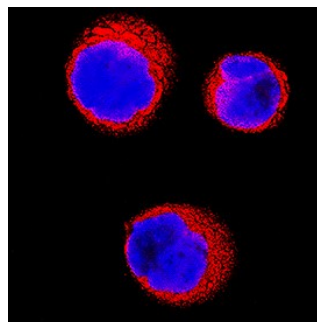
DATA

Western Blot



Detection of Human PNMT by Western Blot. 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.

Immunocytochemistry



PNMT in K562 Human Cell Line. 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 [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

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

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.