

PEMT Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP1025b**Specification**

PEMT Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9UBM1](#)**PEMT Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 10400**Other Names**

Phosphatidylethanolamine N-methyltransferase, PEAMT, PEMT, PEMT2, PEMT, PEMPT, PNMT

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1025b](/product/products/AP1025b) was selected from the C-term region of human PEMT. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PEMT Antibody (C-term) Blocking Peptide - Protein Information**Name** PEMT {ECO:0000255|HAMAP-Rule:MF_03216}**Synonyms** PEMPT, PNMT**Function**

Catalyzes the three sequential steps of the methylation pathway for the biosynthesis of phosphatidylcholine, a critical and essential component for membrane structure (PubMed: [12431977](http://www.uniprot.org/citations/12431977), PubMed: [15927961](http://www.uniprot.org/citations/15927961)). Uses S-adenosylmethionine (S-adenosyl-L-methionine, SAM or AdoMet) as the methyl group donor for the methylation of phosphatidylethanolamine (1,2-diacyl-sn-glycero-3-phosphoethanolamine, PE) to phosphatidylmonomethylethanolamine (1,2-diacyl-sn-glycero-3-phospho-N-methylethanolamine, PMME), PMME to phosphatidyl dimethylethanolamine (1,2-diacyl-sn-glycero-3-phospho-N,N-dimethylethanolamine, PDME), and PDME to phosphatidylcholine (1,2-diacyl-sn-glycero-3-phosphocholine, PC), producing S-adenosyl-L-

homocysteine in each step (PubMed:12431977, PubMed:15927961). Responsible for approximately 30% of hepatic PC with the CDP-choline pathway accounting for the other 70% (Probable).

Cellular Location

Endoplasmic reticulum. Note=localized in the endoplasmic reticulum (ER) of the liver and in a lipid metabolism-rich region of the ER known as mitochondria-associated membranes (PubMed:15927961) Adopts a topography within the ER membrane that positions both termini in the cytosol (PubMed:12431977). [Isoform 2]: Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03216}

Tissue Location

Primarily expressed in liver (at protein level).

PEMT Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

PEMT Antibody (C-term) Blocking Peptide - Images

PEMT Antibody (C-term) Blocking Peptide - Background

PEMT is an enzyme which converts phosphatidylethanolamine to phosphatidylcholine by sequential methylation in the liver. The protein localizes to the endoplasmic reticulum and mitochondria-associated membranes. The gene is within the Smith-Magenis syndrome region on chromosome 17.

PEMT Antibody (C-term) Blocking Peptide - References

Walkey C.J., Biochim. Biophys. Acta 1436:405-412(1999).Shields D.J., Biochim. Biophys. Acta 1532:105-114(2001).Hu R.-M., Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).