

**PEMT Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1025B**

**Specification**

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**PEMT Antibody (C-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">O9UBM1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	170-199

**PEMT Antibody (C-term) - Additional Information**

**Gene ID** 10400

**Other Names**

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

**Target/Specificity**

This PEMT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 170-199 amino acids from the C-terminal region of human PEMT.

**Dilution**

WB~~1:1000  
IHC-P~~1:100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PEMT Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PEMT Antibody (C-term) - 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](#), PubMed:[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

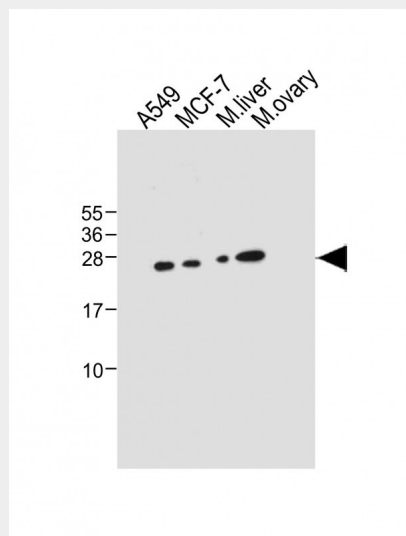
Primarily expressed in liver (at protein level).

#### PEMT Antibody (C-term) - Protocols

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

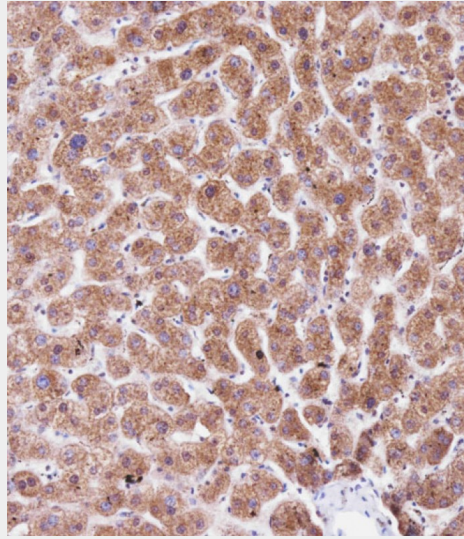
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### PEMT Antibody (C-term) - Images

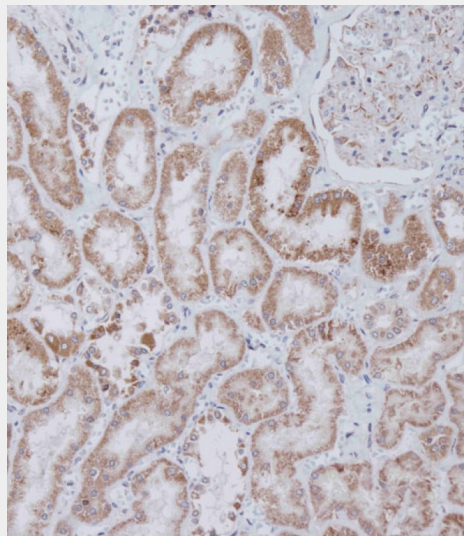


All lanes : Anti-PEMT Antibody (C-term) at 1:1000 dilution Lane 1: A549 whole cell lysate Lane 2:

MCF-7 whole cell lysate Lane 3: Mouse liver tissue lysate Lane 4: Mouse ovary tissue lysate  
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated  
at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of AP1025B on paraffin-embedded Human liver tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of AP1025B on paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

### **PEMT Antibody (C-term) - 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) - 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).