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PEMT Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1025B

Specification

PEMT Antibody (C-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q9UBM1
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
IHC-P~~1:100
WB~~1:1000
E~~Use at an assay dependent concentration.

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 phosphatidyldimethylethanolamine (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}

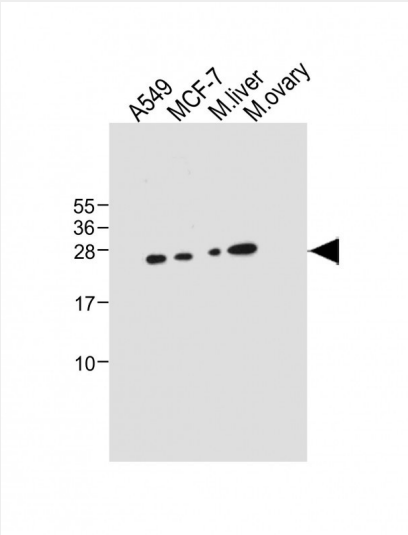
Tissue Location
Primarily expressed in liver (at protein level).

PEMT Antibody (C-term) - Protocols

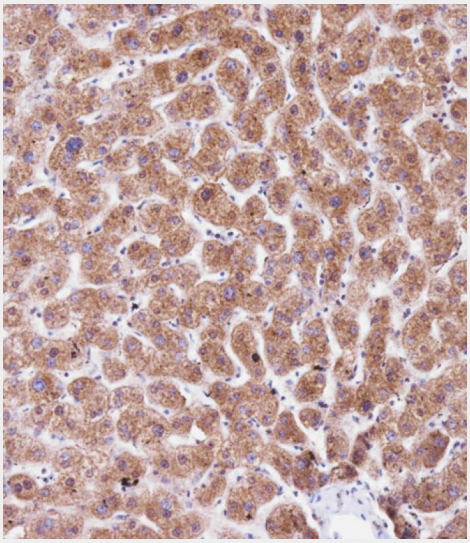
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

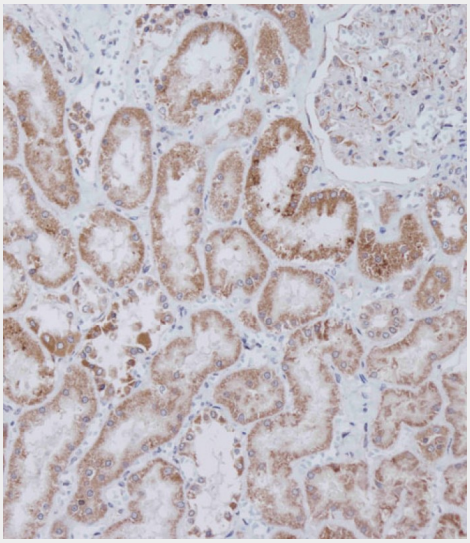
PEMT Antibody (C-term) - Images



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.

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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).