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PEAMT Rabbit pAb

Catalog # AP99827

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UBM1
Other Accession	Q9UBM1
Predicted	Rat, Human, Mouse, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22134
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PEAMT
Epitope Specificity	121-199/199
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the PEMT/PEM2 methyltransferase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Phosphatidylcholine (PC) is the most abundant mammalian phospholipid. This gene encodes an enzyme which converts phosphatidylethanolamine to phosphatidylcholine by sequential methylation in the liver. Another distinct synthetic pathway in nucleated cells converts intracellular choline to phosphatidylcholine by a three-step process. The protein isoforms encoded by this gene localize to the endoplasmic reticulum and mitochondria-associated membranes. Alternate splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, May 2012]

Additional Information

Gene ID	10400
Other Names	PEAMT; PEMPT; PEMT2; PLMT; PNMT; PEMT_HUMAN; PEMT; Phospholipid methyltransferase (PLMT); 2.1.1.17; 2.1.1.71; phosphatidylethanolamine N-methyltransferase
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.