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CHPT1 Rabbit pAb

Catalog # AP96815

Product Information

Application	WB
Primary Accession	Q8WUD6
Other Accession	Q8WUD6
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45097
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CHPT1
Epitope Specificity	61-160/406
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 CDP-alcohol phosphatidyltransferase class-I family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CHPT1, also known as AAPT1-like protein and Diacylglycerol cholinephosphotransferase 1, is a 406 amino acid multi-pass membrane protein that is localized to the golgi apparatus. By catalyzing the phosphatidylcholine biosynthesis from CDP-choline, it plays an essential role in the formation and maintenance of vesicular membranes. CHPT1 is most abundant in testis, as well as small intestine, heart, colon, spleen and prostate. Expression of CHPT1 is increased in cancerous breast cells as compared to normal breast cell lines and it has been determined that the CHPT1 gene exhibits mutations within the cancerous cells. Interestingly, exposure to mustard gas significantly decreases CHPT1 gene expression and activity, an event that may play an important role in the development of acute respiratory distress syndrome (ARDS). There are two isoforms of CHPT1 that are produced as a result of alternative splicing events.

Additional Information

Gene ID	56994
Other Names	CPT; CPT1; CHPT1_HUMAN; CHPT1; hCPT1; AAPT1-like protein; Diacylglycerol cholinephosphotransferase 1; 2.7.8.2; choline phosphotransferase 1; phosphatidylcholine synthesizing enzyme
Dilution	WB=1:500-2000
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	CHPT1 (HGNC:17852)
Synonyms	CPT1
Function	Catalyzes the final step of de novo phosphatidylcholine (PC) synthesis, i.e. the transfer of choline phosphate from CDP-choline to the free hydroxyl of a diacylglycerol (DAG), producing a PC. It thereby plays a central role in the formation and maintenance of vesicular membranes.
Cellular Location	Golgi apparatus membrane; Multi-pass membrane protein
Tissue Location	Highly expressed in testis, colon, small intestine, heart, prostate and spleen. Also detected in kidney, skeletal muscle, pancreas, leukocytes, ovary and thymus. Weakly expressed in the brain, placenta and lung. Overexpressed in cancerous breast epithelial cell lines.

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