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CEPT1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10372a

Product Information

Application	WB, IHC-P, IHC-P-Leica, E
Primary Accession	Q9Y6K0
Other Accession	Q7ZYQ3, Q6AXM5, Q8BGS7, NP_001007795.1, NP_006081.1
Reactivity	Human, Mouse, Rat
Predicted	Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28024
Calculated MW	46554
Antigen Region	29-57

Additional Information

Gene ID	10390
Other Names	Choline/ethanolaminephosphotransferase 1, hCEPT1, CEPT1
Target/Specificity	This CEPT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 29-57 amino acids from the N-terminal region of human CEPT1.
Dilution	WB~~1:2000 IHC-P~~1:100~500 IHC-P-Leica~~1:500 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	CEPT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CEPT1 {ECO:0000303|PubMed:12216837, ECO:0000312|HGNC:HGNC:24289}
Function	Catalyzes both phosphatidylcholine and phosphatidylethanolamine biosynthesis from CDP-choline and CDP- ethanolamine, respectively

	(PubMed:10191259, PubMed:10893425, PubMed:12216837, PubMed:37137909). Involved in protein-dependent process of phospholipid transport to distribute phosphatidyl choline to the lumenal surface (PubMed:10191259, PubMed:10893425, PubMed:12216837). Has a higher cholinephosphotransferase activity than ethanolaminephosphotransferase activity (PubMed:10191259, PubMed:12216837).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Nucleus membrane; Multi-pass membrane protein
Tissue Location	Ubiquitously expressed.

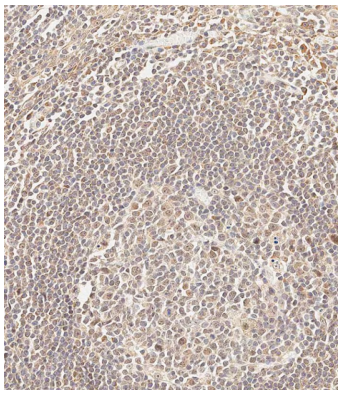
Background

Cholinephosphotransferase catalyses the final step in the synthesis of phosphatidylcholine by the transfer of phosphocholine from CDP-choline to diacylglycerol. The synthesis of phosphatidylethanolamine by ethanolaminephosphotransferase occurs using an analogous reaction. This gene codes for a choline/ethanolaminephosphotransferase. The protein can synthesize either choline- or ethanolamine-containing phospholipids. Two alternatively spliced transcripts encoding the same isoform have been identified.

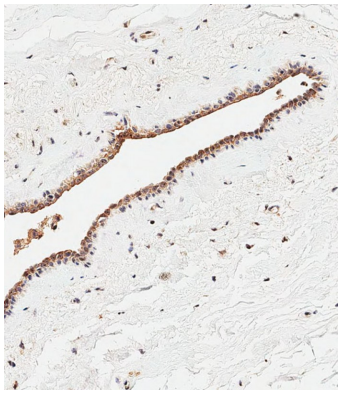
References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Wright, M.M., et al. Lipids 37(7):663-672(2002)
Henneberry, A.L., et al. Biochem. J. 339 (PT 2), 291-298 (1999) :

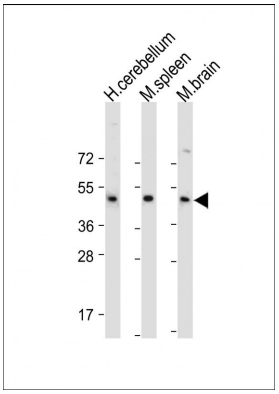
Images



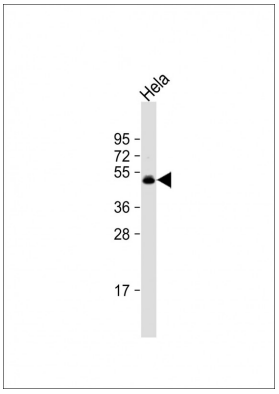
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using AP10372a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



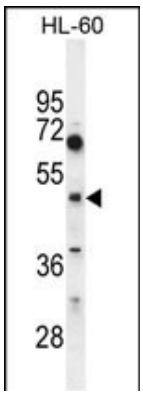
Immunohistochemical analysis of paraffin-embedded Human breast tissue using AP10372a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



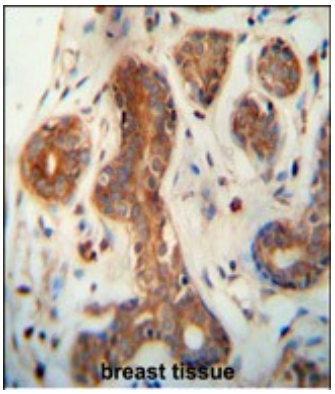
All lanes : Anti-CEPT1 Antibody (N-term) at 1:2000 dilution Lane 1: Human cerebellum tissue lysate Lane 2: Mouse spleen tissue lysate Lane 3: Mouse brain tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-CEPT1 Antibody (N-term) at 1:1000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



CEPT1 Antibody (N-term) (Cat. #AP10372a) western blot analysis in HL60 cell line lysates (35ug/lane).This demonstrates the CEPT1 antibody detected the CEPT1 protein (arrow).



CEPT1 antibody (N-term) (Cat. #AP10372a) immunohistochemistry analysis in formalin fixed and paraffin embedded human breast tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CEPT1 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Long-term autophagy is sustained by activation of CCTβ3 on lipid droplets
- Nuclear lipid droplets derive from a lipoprotein precursor and regulate phosphatidylcholine synthesis.