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GNPAT Rabbit pAb

Catalog # AP97088

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O15228
Other Accession	O15228
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	77188
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GNPAT
Epitope Specificity	201-300/680
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 GPAT/DAPAT family.
SUBUNIT	May be part of an heterotrimeric complex composed of DAP-AT, ADAP-S and a modified form of DAP-AT.
DISEASE	Defects in GNPAT are the cause of rhizomelic chondrodysplasia punctata type 2 (RCDP2) [MIM:222765]. RDCP2 is characterized by rhizomelic shortening of femur and humerus, vertebral disorders, cataract, cutaneous lesions and severe mental retardation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GNPAT is a key enzyme located in the peroxisomal membrane which is essential to the synthesis of ether phospholipids. Mutations in GNPAT are associated with rhizomelic chondrodysplasia punctata type 2, which is characterized by rhizomelic shortening of femur and humerus, vertebral disorders, cataract, cutaneous lesions and severe mental retardation.

Additional Information

Gene ID	8443
Other Names	DAP-AT; DAPAT; DHAPAT; RCDP2; D1Ertd819e; GNPAT_HUMAN; GNPAT; DHAP-AT; Acyl-CoA:dihydroxyacetonephosphateacyltransferase; Glycerone-phosphate O-acyltransferase; 2.3.1.42; GNPAT_MOUSE; glyceronephosphate O-acyltransferase; dihydroxyacetone phosphate acyltransferase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	GNPAT (HGNC:4416)
Function	Dihydroxyacetonephosphate acyltransferase catalyzing the first step in the biosynthesis of plasmalogens, a subset of phospholipids that differ from other glycerolipids by having an alkyl chain attached through a vinyl ether linkage at the sn-1 position of the glycerol backbone, and which unique physical properties have an impact on various aspects of cell signaling and membrane biology.
Cellular Location	Peroxisome membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9ES71}; Matrix side {ECO:0000250|UniProtKB:Q9ES71}. Note=Exclusively localized to the lumenal side of the peroxisomal membrane {ECO:0000250|UniProtKB:Q9ES71}

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