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GDPD1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55132

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q8N9F7
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36167
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GDPD1/GDE4
Epitope Specificity	221-314/314
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Membrane; Multi-pass membrane protein (Potential).
SIMILARITY	Belongs to the glycerophosphoryl diester phosphodiesterase family.Contains 1 GDPD domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GDE4 is a 314 amino acid cytoplasmic and multi-pass membrane protein that belongs to the glycerophosphoryl diester phosphodiesterase family. Expressed in small intestine, placenta, kidney, ovary, thymus, pancreas, spleen, liver and peripheral blood leukocytes, GDE4 contains one GDPD domain and exists as three alternatively spliced isoforms. GDE4 is encoded by a gene that maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1.

Additional Information

Gene ID	284161
Other Names	Lysophospholipase D GDPD1, 3.1.4.-, Glycerophosphodiester phosphodiesterase 4, Glycerophosphodiester phosphodiesterase domain-containing protein 1, GDPD1 (HGNC:20883)
Target/Specificity	Detected in placenta, liver, kidney, pancreas, spleen, thymus, ovary, small intestine and peripheral blood leukocytes.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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	GDPD1 (HGNC:20883)
Function	Hydrolyzes lysoglycerophospholipids to produce lysophosphatidic acid (LPA) and the corresponding amines (PubMed:25596343, PubMed:27637550). Shows a preference for 1-O-alkyl- sn-glycero-3-phosphocholine (lyso-PAF), lysophosphatidylethanolamine (lyso-PE) and lysophosphatidylcholine (lyso-PC) (PubMed:25596343, PubMed:27637550). May be involved in bioactive N-acylethanolamine biosynthesis from both N-acyl-lysoplasmenylethanolamin (N-acyl- lysoPlsEt) and N-acyl-lysophosphatidylethanolamin (N-acyl-lysoPE) (PubMed:25596343, PubMed:27637550). In addition, hydrolyzes glycerophospho-N-acylethanolamine to N-acylethanolamine (PubMed:27637550). Does not display glycerophosphodiester phosphodiesterase activity, since it cannot hydrolyze either glycerophosphoinositol or glycerophosphocholine (By similarity).
Cellular Location	Cytoplasm. Membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region. Endoplasmic reticulum. Note=Concentrated at the perinuclear region and the cell periphery (PubMed:18991142)
Tissue Location	Widely expressed with high expression level in testis.