

GDPD3 Rabbit pAb

Catalog # AP98917

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q7L5L3
Other Accession	Q7L5L3
Reactivity	Human
Predicted	Rat, Mouse, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36596
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GDPD3
Epitope Specificity	101-200/318
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 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	GDE3, also known as glycerophosphodiester phosphodiesterase 3, glycerophosphodiester phosphodiesterase domain containing 2 (GDPD2) or osteoblast differentiation promoting factor (OBDPF), is a 539 amino acid protein belonging to the glycerophosphoryl diester phosphodiesterase family. Possessing glycerophosphoinositol inositolphosphodiesterase activity, GDE3 hydrolyzes glycerophosphoinositol to form inositol 1-phosphate and glycerol, and is suggested to play a role in Actin cytoskeleton remodeling and osteoblast differentiation and growth. A multi-pass membrane protein, GDE3 localizes to cell membrane and cytoplasm, and colocalizes with actin in the cytoskeleton. GDE3 contains one GDPD domain, binds calcium as a cofactor and is encoded by a gene mapping to human chromosome Xq13.1.

Additional Information

Gene ID	79153
Other Names	GDE7; GDPD3_HUMAN; GDPD3; Glycerophosphodiester phosphodiesterase 7; Glycerophosphodiester phosphodiesterase domain-containing protein 3; 3.1.4.-; glycerophosphodiester phosphodiesterase domain containing 3
Dilution	IHC-P=1:100-500,IHC-F=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	GDPD3 (HGNC:28638)
Function	Hydrolyzes lysoglycerophospholipids to produce lysophosphatidic acid (LPA) and the corresponding amines (PubMed: 27637550). Shows a preference for 1-O-alkyl-sn-glycero-3- phosphocholine (lyso-PAF), lysophosphatidylcholine (lyso-PC) and N- acylethanolamine lysophospholipids (PubMed: 27637550). Does not display glycerophosphodiester phosphodiesterase activity, since it cannot hydrolyze either glycerophosphoinositol or glycerophosphocholine.
Cellular Location	Membrane {ECO:0000250 UniProtKB:Q99LY2}; Multi- pass membrane protein {ECO:0000250 UniProtKB:Q99LY2}. Cytoplasm, perinuclear region {ECO:0000250 UniProtKB:Q99LY2}. Endoplasmic reticulum. Note=Partially co-localized with CANX. {ECO:0000250 UniProtKB:Q99LY2}
Tissue Location	Widely expressed, with high level in kidney and ovary.

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