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GDE1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18638c

Product Information

Application	WB, FC, E
Primary Accession	Q9NZC3
Other Accession	NP_057725.1
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37323
Calculated MW	37718
Antigen Region	192-219

Additional Information

Gene ID	51573
Other Names	Glycerophosphodiester phosphodiesterase 1, Membrane-interacting protein of RGS16, RGS16-interacting membrane protein, GDE1, MIR16
Target/Specificity	This GDE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 192-219 amino acids of human GDE1.
Dilution	WB~~1:1000 FC~~1:25 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	GDE1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GDE1 (HGNC:29644)
Function	Hydrolyzes the phosphodiester bond of glycerophosphodiesters such as glycerophosphoinositol (GroPIns) and glycerophosphoethanolamine (GroPEth), to yield a glycerol phosphate and an alcohol (By similarity). Hydrolyzes glycerophospho-N-acylethanolamines to N- acylethanolamines in

	the brain and participates in bioactive N- acylethanolamine biosynthesis such as anandamide (an endocannabinoid), N-palmitoylethanolamine (an anti-inflammatory), and N- oleoylethanolamine (an anorexic). In addition, has a lysophospholipase D activity by hydrolyzing N-acyl-lysoplasmenylethanolamine (N-acyl- lysoPlsEt) to N-acylethanolamine. However lysophospholipase D activity is lower than glycerophosphodiester phosphodiesterase activity (By similarity). Has little or no activity towards glycerophosphocholine (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q9JL55}; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q9JL55}; Multi-pass membrane protein. Note=Perinuclear vesicles and cell membrane {ECO:0000250|UniProtKB:Q9JL55}
Tissue Location	Widely expressed..

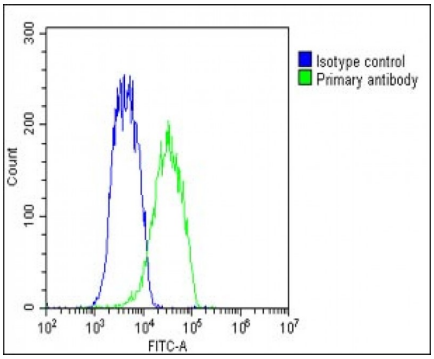
Background

GDE1 has glycerophosphoinositol phosphodiesterase activity. Has little or no activity towards glycerophosphocholine. GDE1 activity can be modulated by G-protein signaling pathways (By similarity).

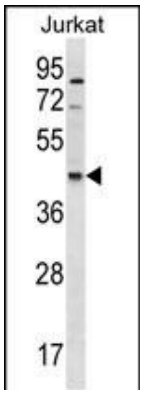
References

Zhang, X., et al. Cancer Res. 70(18):7176-7186(2010)
Corthals, S.L., et al. Leuk. Res. 34(5):677-681(2010)
Simon, G.M., et al. J. Biol. Chem. 283(14):9341-9349(2008)
Ma, J., et al. Atherosclerosis 191(1):63-72(2007)
Bachmann, A.S., et al. Gene 371(1):144-153(2006)

Images



Overlay histogram showing Hela cells stained with AP18638c(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP18638c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



GDE1 Antibody (Center) (Cat. #AP18638c) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the GDE1 antibody detected the GDE1 protein (arrow).

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