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DAGLB Rabbit pAb

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Catalog # AP55452

Product Information

Application	E
Primary Accession	Q8NCG7
Reactivity	Mouse
Predicted	Human, Rat, Pig, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73732
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DAGLB
Epitope Specificity	51-150/672
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane.
SIMILARITY	Belongs to the AB hydrolase superfamily. Lipase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KCCR13L, is a 672 amino acid multi-pass membrane protein that belongs to the AB hydrolase superfamily. DAGL beta uses calcium as a cofactor to catalyze the hydrolysis of diacylglycerol (DAG) to 2-arachidonoyl-glycerol (2-AG), a reaction that is required for axonal growth and for retrograde synaptic signaling at mature synapses. DAGL beta functions at an optimal pH of 7 and its activity is inhibited by p-hydroxy-mercuri-benzoate and HgCl2, but not PMSF. There are three isoforms of DAGL beta that are produced as a result of alternative splicing events.

Additional Information

Gene ID	221955
Other Names	Diacylglycerol lipase-beta, DAGL-beta, DGL-beta, 3.1.1.116, KCCR13L, PUFA-specific triacylglycerol lipase, Sn1-specific diacylglycerol lipase beta, DAGLB
Dilution	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	DAGLB
Function	Lipase that catalyzes the hydrolysis of arachidonic acid (AA)-esterified diacylglycerols (DAGs) to produce the principal endocannabinoid, 2-arachidonoylglycerol (2-AG) which can be further cleaved by downstream enzymes to release arachidonic acid (AA) for cyclooxygenase (COX)-mediated eicosanoid production (PubMed:14610053). Preferentially hydrolyzes DAGs at the sn-1 position in a calcium- dependent manner and has negligible activity against other lipids including monoacylglycerols and phospholipids (PubMed:14610053). Plays a key role in the regulation of 2-AG and AA pools utilized by COX1/2 to generate lipid mediators of macrophage and microglia inflammatory responses. Also functions as a polyunsaturated fatty acids-specific triacylglycerol lipase in macrophages. Plays an important role to support the metabolic and signaling demands of macrophages (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein

Background

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