10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DAGLB Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9323c

Product Information

Application	WB, FC, E
Primary Accession	Q8NCG7
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23594
Calculated MW	73732
Antigen Region	491-518

Additional Information

Gene ID	221955
Other Names	Sn1-specific diacylglycerol lipase beta, DGL-beta, 311-, KCCR13L, DAGLB
Target/Specificity	This DAGLB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 491-518 amino acids from the Central region of human DAGLB.
Dilution	WB~~1:1000 FC~~1:10~50 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	DAGLB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

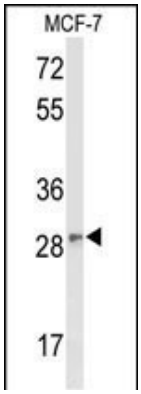
Background

Catalyzes the hydrolysis of diacylglycerol (DAG) to 2-arachidonoyl-glycerol (2-AG), the most abundant endocannabinoid in tissues. Required for axonal growth during development and for retrograde synaptic signaling at mature synapses.

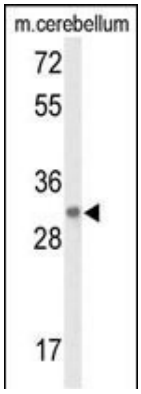
References

Ma,J. Atherosclerosis 191 (1), 63-72 (2007)
Bisogno,T. J. Cell Biol. 163 (3), 463-468 (2003)
Lanfranchi,G. Genome Res. 6 (1), 35-42 (1996)

Images

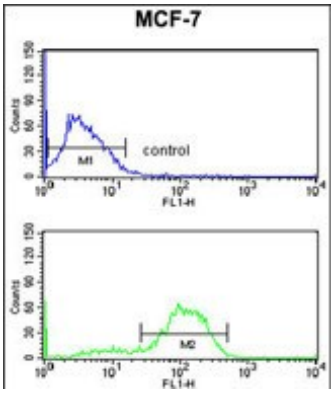


Western blot analysis of DAGLB Antibody (Center) (Cat. #AP9323c) in MCF-7 cell line lysates (35ug/lane). DAGLB (arrow) was detected using the purified Pab;



Western blot analysis of DAGLB Antibody (Center) (Cat. #AP9323c) in mouse cerebellum tissue lysates (35ug/lane). DAGLB (arrow) was detected using the purified Pab.

DAGLB Antibody (Center) (Cat. #AP9323c) flow cytometry analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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