

DAGLB Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55452

Specification

DAGLB Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity affinity purified by Protein A	E <u>O8NCG7</u> Rat, Pig, Bovine Rabbit Polyclonal 74 KDa Liquid KLH conjugated synthetic peptide derived from human DAGLB 51-150/672 IgG
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION SIMILARITY	Cell membrane. 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.

DAGLB Polyclonal Antibody - Additional Information

Gene ID 221955

Other Names Diacylglycerol lipase-beta, DAGL-beta, DGL-beta, 3.1.1.-, KCCR13L, PUFA-specific triacylglycerol lipase, Sn1-specific diacylglycerol lipase beta, DAGLB

Dilution E~~N/A

Format 0.01M TBS(pH7.4), 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.

DAGLB Polyclonal Antibody - 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

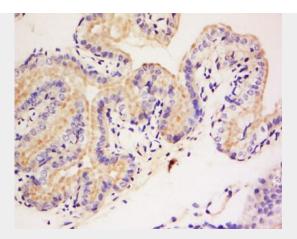
DAGLB Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

DAGLB Polyclonal Antibody - Images





Tissue/cell: Mouse placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-DAGLB Polyclonal Antibody, Unconjugated(bs-14190R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining