

DAGLA Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54642

Product Information

Application IHC-P, IHC-F, IF, ICC

Primary Accession Q9Y4D2

Reactivity Rat, Pig, Dog, Bovine

HostRabbitClonalityPolyclonalCalculated MW114952

Additional Information

Gene ID 747

Other Names Diacylglycerol lipase-alpha, DAGL-alpha, DGL-alpha, 3.1.1.-, Neural stem

cell-derived dendrite regulator {ECO:0000303 | Ref.1}, Sn1-specific diacylglycerol lipase alpha, DAGLA, C11orf11, KIAA0659, NSDDR

{ECO:0000303 | Ref.1}

Dilution Elisa=1:500-1000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ICC=1:100-5

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Format 0.01M TBS(pH7.4) with 1% BSA, 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.

Protein Information

Name DAGLA

Synonyms C11orf11, KIAA0659, NSDDR {ECO:0000303 | R

Function Serine hydrolase that hydrolyzes arachidonic acid-esterified diacylglycerols

(DAGs) to produce the principal endocannabinoid, 2- arachidonoylglycerol (2-AG) (PubMed:14610053, PubMed:23502535, PubMed:26668358). Preferentially hydrolyzes sn-1 fatty acids from diacylglycerols (DAG) that contain arachidonic acid (AA) esterified at the sn-2 position to biosynthesize 2-AG (PubMed:14610053, PubMed:23502535, PubMed:26668358). Has negligible activity against other lipids including monoacylglycerols and phospholipids (PubMed:14610053). Plays a key role in regulating 2-AG signaling in the central nervous system (CNS). Regulates 2-AG involved in retrograde suppression at central synapses. Supports axonal growth during development and adult neurogenesis. Plays a role for eCB signaling in the

physiological regulation of anxiety and depressive behaviors. Also regulates neuroinflammatory responses in the brain, in particular, LPS- induced microglial activation (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Postsynaptic density membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Cell projection, dendritic spine membrane {ECO:0000250|UniProtKB:Q6WQJ1}; Multi-pass membrane protein. Note=Cycles between the cell surface and an intracellular endosomal compartment. Internalized by early endosomes via a clathrin-independent pathway before transport back to the postsynaptic membrane surface in a PKC-dependent manner

Tissue Location

Highly expressed in brain and pancreas.

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