

DAGLA Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10260C

Specification

DAGLA Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	O9Y4D2
Other Accession	O5YLM1 , O6WQJ1 , NP_006124.1
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	114952
Antigen Region	317-345

DAGLA Antibody (Center) - Additional Information

Gene ID 747

Other Names

Sn1-specific diacylglycerol lipase alpha, DGL-alpha, 311-, Neural stem cell-derived dendrite regulator, DAGLA, C11orf11, KIAA0659, NSDDR

Target/Specificity

This DAGLA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 317-345 amino acids from the Central region of human DAGLA.

Dilution

WB~~1:1000

IHC-P~~1:50~100

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

DAGLA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DAGLA Antibody (Center) - 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

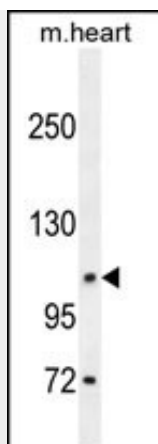
Highly expressed in brain and pancreas.

DAGLA Antibody (Center) - Protocols

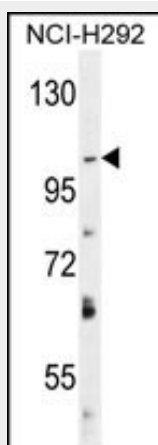
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

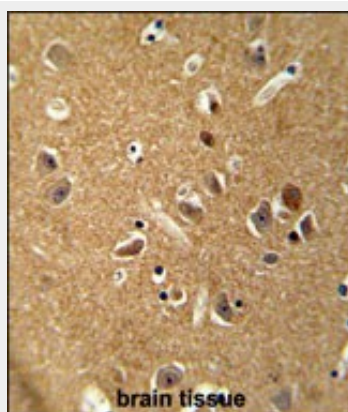
DAGLA Antibody (Center) - Images



DAGLA Antibody (Center) (Cat. #AP10260c) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the DAGLA antibody detected the DAGLA protein (arrow).



DAGLA Antibody (Center) (Cat. #AP10260c) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the DAGLA antibody detected the DAGLA protein (arrow).



DAGLA antibody (Center) (Cat. #AP10260c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DAGLA antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

DAGLA Antibody (Center) - Background

This gene encodes a diacylglycerol lipase. The encoded enzyme is involved in the biosynthesis of the endocannabinoid

2-arachidonoyl-glycerol.

DAGLA Antibody (Center) - References

Knight, M.A., et al. Hum. Mol. Genet. 17(24):3847-3853(2008)
Jung, K.M., et al. Mol. Pharmacol. 68(5):1196-1202(2005)
Bisogno, T., et al. J. Cell Biol. 163(3):463-468(2003)