

## DAGLA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10260C

### Specification

# **DAGLA Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O9Y4D2</u> <u>O5YLM1</u>, <u>O6WOJ1</u>, <u>NP\_006124.1</u> Human, Mouse Rat Rabbit Polyclonal Rabbit IgG 114952 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

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:<u>14610053</u>, PubMed:<u>26668358</u>, PubMed:<u>23502535</u>). 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:<u>14610053</u>, PubMed:<u>26668358</u>, PubMed:<u>23502535</u>). Has negligible activity against other lipids including monoacylglycerols and phospholipids (PubMed:<u>14610053</u>). 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. Regulates also 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

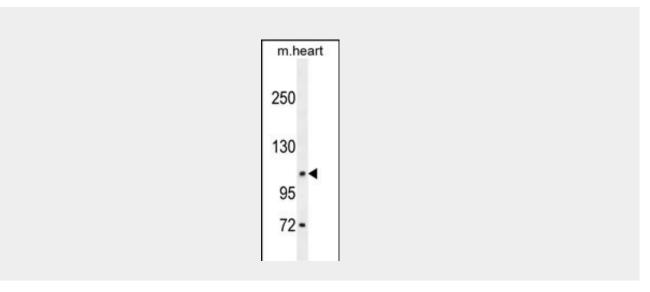
Highly expressed in brain and pancreas.

# DAGLA Antibody (Center) - Protocols

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

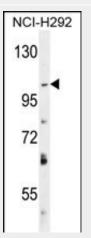
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **DAGLA Antibody (Center) - Images**

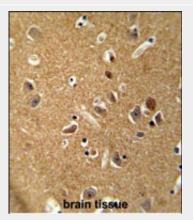




DAGLA Antibody (Center) (Cat. #AP10260c) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the DAGLA antibody detected the DAGLA protein (arrow).



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)