

DAGL α (C-14): sc-133307

BACKGROUND

Members of the AB hydrolase superfamily have diverse catalytic functions and play a crucial role in the metabolism of lipids. DAGL α (diacylglycerol lipase α), also known as NSDDR or C11orf11, is a 1,042 amino acid multi-pass membrane protein that belongs to the AB hydrolase superfamily. Highly expressed in brain and pancreas, DAGL α 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 α functions as at optimal pH of 7 and its activity is inhibited by p-hydroxy-mercuri-benzoate and HgCl₂. The gene encoding DAGL α maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome.

CHROMOSOMAL LOCATION

Genetic locus: DAGLA (human) mapping to 11q12.2; Dagla (mouse) mapping to 19 A.

SOURCE

DAGL α (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of DAGL α of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133307 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DAGL α (C-14) is recommended for detection of DAGL α isoforms 1-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with DAGL β .

DAGL α (C-14) is also recommended for detection of DAGL α isoforms 1-3 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for DAGL α siRNA (h): sc-96964, DAGL α siRNA (m): sc-142868, DAGL α shRNA Plasmid (h): sc-96964-SH, DAGL α shRNA Plasmid (m): sc-142868-SH, DAGL α shRNA (h) Lentiviral Particles: sc-96964-V and DAGL α shRNA (m) Lentiviral Particles: sc-142868-V.

Molecular Weight of DAGL α : 120 kDa.

Positive Controls: mouse skeletal muscle extract: sc-364250.

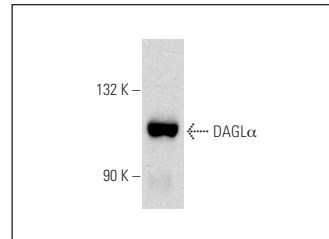
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



DAGL α (C-14): sc-133307. Western blot analysis of DAGL α expression in mouse skeletal muscle tissue extract.

SELECT PRODUCT CITATIONS

- Costa, M.A., Fonseca, B.M., Keating, E., Teixeira, N.A. and Correia-da-Silva, G. 2014. 2-arachidonoylglycerol effects in cytotrophoblasts: metabolic enzymes expression and apoptosis in BeWo cells. *Reproduction* 147: 301-311.
- Costa, M.A., Keating, E., Fonseca, B.M., Teixeira, N.A. and Correia-da-Silva, G. 2014. 2-Arachidonoylglycerol impairs human cytotrophoblast cells syncytialization: influence of endocannabinoid signalling in placental development. *Mol. Cell. Endocrinol.* 399: 386-394.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **DAGL α (E-6): sc-390409**, our highly recommended monoclonal alternative to DAGL α (C-14).