SANTA CRUZ BIOTECHNOLOGY, INC.

DAGLα (H-156): sc-292130

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Members of the AB hydrolase superfamily have diverse catalytic functions and play a crucial role in the metabolism of lipids. DAGLα (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, DAGLα 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. DAGLα functions as at optimal pH of 7 and its activity is inhibited by p-hydroxy-mercuri-benzoate and $HgCl_2$. The gene encoding DAGLα maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

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

RESEARCH USE

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

SOURCE

DAGLα (H-156) is a rabbit polyclonal antibody raised against amino acids 887-1042 mapping within a C-terminal cytoplasmic domain of DAGLα of human origin.

PRODUCT

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

APPLICATIONS

DAGLα (H-156) is recommended for detection of DAGLα of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 DAGLβ.

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

Molecular Weight of DAGLα: 120 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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