

DAGL β antibody

#Cat: NB-19-0015

Size: 0,1ml

Immunogen Data

Description: DAGL β (diacylglycerol lipase β) is a phosphodiesterase that belongs to the metallo-lactamase family. It catalyzes the hydrolysis of diacylglycerol (DAG) to 2 arachidonoylglycerol (2-AG), the most abundant endocannabinoid in the brain. It is required for axonal growth during development and for retrograde synaptic signaling at mature synapses.

Immunogen: Synthetic peptide (SSDSPLDSPTKYPTLC), corresponding to an internal sequence of rat/mouse DAGL β .

Alternative names: RGD1310193 or KCCR13L.

UniProt ID: POC1S9.

Mol. Weight: 76 kD.

Antibody Data

Host: Rabbit

Clonality: Polyclonal

Species Reactivity: rat, mouse and human.

Concentration: 0.45 mg/ml

Volume: 100 μ l

Purity: affinity purified.

Storage Buffer: PBS 1X, sodium azide 0.05%, BSA 1 mg/ml and glycerol 50%.

Storage Instruction: Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Tested applications

DAGL β antibody is recommended for detection of DAGL β of mouse, rat and human origin by Western Blotting (starting dilution 1/100, dilution range 1/100-1/500) and immunohistochemistry (starting dilution 1/100, dilution range 1/50-1/500); non cross-reactive with DAGL α .

Recommended Dilutions:

WB: 1/100-1/500

IHC/IF: 1/50-1/500

Background references

(1) Bisogno T, Howell F, Williams G, Minassi A, Cascio MG, Ligresti A, Matias I, Schiano Moriello A, Paul P, Williams EJ, Gangadharan U, Hobbs C, Di Marzo V, Doherty P. 2003. Cloning of the first sn1-dag lipases points to the spatial and temporal regulation of endocannabinoid signaling in the brain. J Cell Biol 163:463–468.

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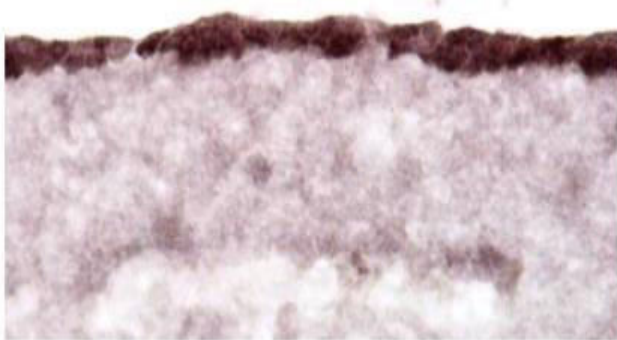
Applicated references

(2) Bermúdez-Silva FJ, Suárez J, Baixeras E, Cobo N, Bautista D, Cuesta-Muñoz AL, Fuentes E, Juan-Pico P, Castro MJ, Milman G, Mechoulam R, Nadal A, Rodríguez de Fonseca F. Presence of functional cannabinoid receptors in human endocrine pancreas. *Diabetologia* 2008 51(3):476-87.

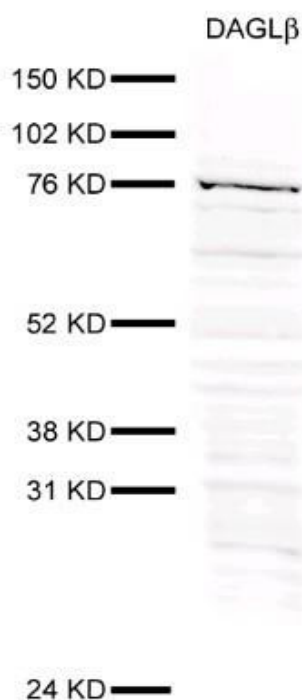
(3) Suárez J, Bermúdez-Silva FJ, Mackie K, Ledent C, Zimmer A, Cravatt BF, de Fonseca FR. Immunohistochemical description of the endogenous cannabinoid system in the rat cerebellum and functionally related nuclei. *J Comp Neurol* 2008 509:400–402.

(4) Márquez L, Suárez J, Iglesias M, Bermúdez-Silva FJ, Rodríguez de Fonseca F, Andreu M. Ulcerative Colitis induces changes on the expression of the endocannabinoid system in the human colonic tissue. *Plos One* 2009 34:e6893.

(5) Suárez J, Romero-Zerbo SY, Rivera P, Bermúdez-Silva FJ, Pérez J, De Fonseca FR, Fernández-Llebrez P. Endocannabinoid system in the adult rat circumventricular areas: an immunohistochemical study. *J Comp Neurol*. 2010 Aug 1;518(15):3065-85.



1. Immunohistochemical detection of DAGLβ using NB-19-0015 on formaldehyde fixed rat ependyma slices. Antigen retrieval: 30 min incubation at 80°C in 50 mM sodium citrate pH 9. 10% donkey serum as blocking agent for 1 hour. Primary antibody dilution 1/50, overnight. Secondary antibody: anti-rabbit biotin-conjugated IgG (1/500) (Suárez *et al.*, 2010)



2. Immunoblot of DAGLβ by using antibody (NB-19-0015) at 1/100 in 40 µg of rat brain membranes, developed using the ECL technique.

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