SANTA CRUZ BIOTECHNOLOGY, INC.

DLK2 (P-15): sc-167637



The Power to Question

BACKGROUND

DLK2 (δ homolog 2), also known as EGFL9 (epidermal growth factor-like protein 9), is a 383 amino acid single-pass transmembrane protein with 6 tandem EGF-like repeats in the putative extracellular domain, which is characteristic of the EGF-like protein family. DLK2 shares nearly identical structural features with DLK, suggesting that it may function in a similar way. Like DLK, DLK2 affects adipogenesis of 3T3-L1 preadipocytes and mesenchymal C3H10T1/2 cells, yet it does so in an opposite way to that of DLK. Also, expression of DLK and DLK2 are inversely correlated and changes in expression of one gene will affect the expression levels of the other. Therefore, it is likely that adipogenesis is modulated by the coordinated expression of DLK and DLK2. There are two isoforms of DLK2 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DLK2 (human) mapping to 6p21.1.

SOURCE

DLK2 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of DLK2 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-167637 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DLK2 (P-15) is recommended for detection of DLK2 of 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 DLK.

Suitable for use as control antibody for DLK2 siRNA (h): sc-95621, DLK2 shRNA Plasmid (h): sc-95621-SH and DLK2 shRNA (h) Lentiviral Particles: sc-95621-V.

Molecular Weight of DLK2: 41 kDa.

Positive Controls: DLK2 (h): 293T Lysate: sc-111975.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



expression in non-transfected: sc-117752 (A) and human DLK2 transfected: sc-111975 (B) 293T whole cell lysates.

RESEARCH USE

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