

DLK1 Antibody

Purified Mouse Monoclonal Antibody Catalog # A01630a

Specification

DLK1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**

WB, FC, ICC, E <u>P80370</u> Human Mouse Monoclonal IgG1 41kDa KDa

This gene encodes a transmembrane protein containing six epidermal growth factor repeats. The protein is involved in the differentiation of several cell types, including adipocytes; it is also thought to be a tumor suppressor. It is one of several imprinted genes located in a region of on chr 14q32. Certain mutations in this imprinted region can cause phenotypes similar to maternal and paternal uniparental disomy of chromosome 14 (UPD14). This gene is expressed from the paternal allele. A polymorphism within this gene has been associated with child and adolescent obesity. The mode of inheritance for this polymorphism is polar overdominance; this non-Mendelian inheritance pattern was first described in sheep with the callipyge phenotype, which is characterized by muscle hypertrophy and decreased fat mass.

Immunogen Purified recombinant fragment of human DLK1 expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

DLK1 Antibody - Additional Information

Gene ID 8788

Other Names Protein delta homolog 1, DLK-1, pG2, Fetal antigen 1, FA1, DLK1, DLK

Dilution WB~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DLK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



DLK1 Antibody - Protein Information

Name DLK1

Synonyms DLK

Function May have a role in neuroendocrine differentiation.

Cellular Location Membrane; Single-pass type I membrane protein. Cytoplasm {ECO:0000250|UniProtKB:070534}

Tissue Location

Found within the stromal cells in close contact to the vascular structure of placental villi, yolk sac, fetal liver, adrenal cortex and pancreas and in the beta cells of the islets of Langerhans in the adult pancreas. Found also in some forms of neuroendocrine lung tumor tissue

DLK1 Antibody - 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>





Figure 1: Western blot analysis using DLK1 mAb against human DLK1 (AA: 174-349) recombinant protein. (Expected MW is 44.9 kDa)



Figure 2: Immunofluorescence analysis of U251 cells using DLK1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Figure 3: Flow cytometric analysis of NIH/3T3 cells using DLK1 mouse mAb (green) and negative control (red).



DLK1 Antibody - References

1. Epigenetics. 2009 Oct 1;4(7):469-75. 2. Mol Biol Cell. 2009 Jul;20(14):3353-62.