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DLK1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1630a

Product Information

Application	WB, FC, ICC, E
Primary Accession	P80370
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3A10
Isotype	IgG1
Calculated MW	41300
Description	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.

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.

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:O70534}
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

References

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

Images

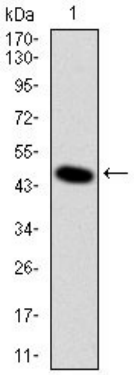


Figure 1: Western blot analysis using DLK1 mAb against human DLK1 (AA: 174-349) recombinant protein. (Expected MW is 44.9 kDa)

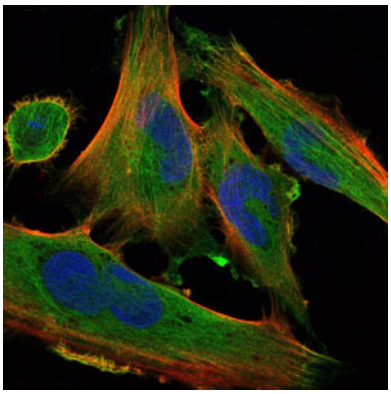


Figure 2: Immunofluorescence analysis of U251 cells using DLK1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

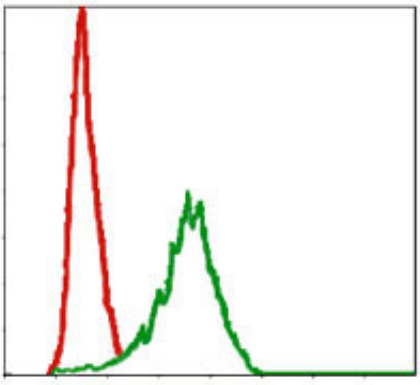


Figure 3: Flow cytometric analysis of NIH/3T3 cells using DLK1 mouse mAb (green) and negative control (red).

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