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DLK1 Antibody

Catalog # ASC11539

Product Information

Application	WB, IF, ICC, E
Primary Accession	P80370
Other Accession	NP_003827, 74136023
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	41300
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DLK1 antibody can be used for detection of DLK1 by Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	8788
Other Names	Protein delta homolog 1, DLK-1, pG2, Fetal antigen 1, FA1, DLK1, DLK
Target/Specificity	DLK1; At least four isoforms of DLK1 are known to exist.
Reconstitution & Storage	DLK1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
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

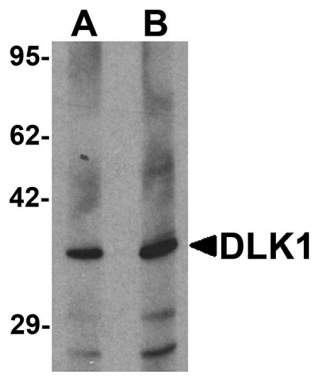
Background

DLK1 Antibody: The Delta-like 1 homolog (DLK1) is a transmembrane protein containing six epidermal growth factor repeats. It is involved in the differentiation of several cell types, including adipocytes and is also thought to be a tumor suppressor. The DLK1 gene is one of several imprinted genes located in a region on chromosome 14q32; certain mutations in this imprinted region can cause phenotypes similar to maternal and paternal uniparental disomy of chromosome 14 (UPD14). DLK1 is expressed from the paternal allele; a polymorphism within this gene has been associated with child and adolescent obesity.

References

Smas CM and Sul HS. Pref-1, a protein containing EGF-like repeats, inhibits adipocyte differentiation. Cell 1993; 73:725-34.
Sul HS. Mini-review: Pref-1: role in adipogenesis and mesenchymal cell fate. Mol. Endocrinol. 2009; 23:1717-25.
Kawakami T, Chano T, Minami K, et al. Imprinted DLK1 is a putative tumor suppressor gene and inactivated by epimutation at the region upstream of GTL2 in human renal cell carcinoma. Hum. Mol. Genet. 2006; 15:821-30.
Wermter AK, Scherag A, Meyre D, et al. Preferential reciprocal transfer of paternal/maternal DLK1 alleles to obese children: first evidence of polar overdomainance in human. Eur. J. Hum. Genet. 2008; 16:1126-34.

Images

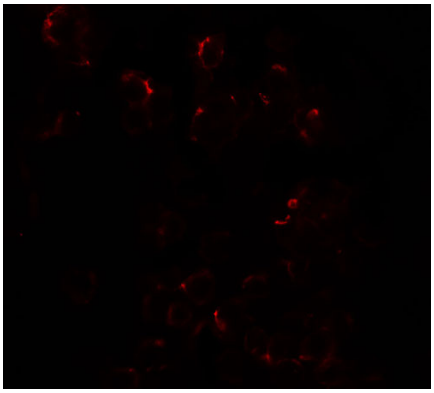


Western blot analysis of HepG2 in 293 cell lysate with DLK1 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of DLK1 in HepG2 cells with DLK1 antibody at 2.5 µg/ml.

Immunofluorescence of DLK1 in HepG2 cells with DLK1 antibody at 20 µg/ml.



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