

# DLK1 Antibody

Catalog # ASC11539

#### Specification

# **DLK1 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Application Notes

WB, ICC, IF <u>P80370</u> NP\_003827, 74136023 Human, Mouse, Rat Rabbit Polyclonal IgG 42 kDa KDa DLK1 antibody can be used for detection of DLK1 by Western blot at 1 - 2 μg/mL.

# DLK1 Antibody - Additional Information

Gene ID 8788 Target/Specificity DLK1; At least four isoforms of DLK1 are known to exist.

**Reconstitution & Storage** 

DLK1 antibody can be stored at 4°C for three months and -20°C, 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.

## **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

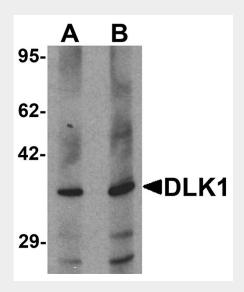


# **DLK1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **DLK1 Antibody - Images**

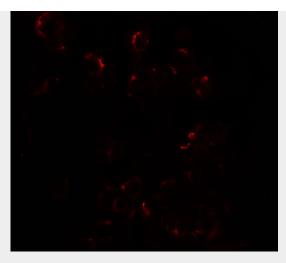


Western blot analysis of HepG2 in 293 cell lysate with DLK1 antibody at (A) 1 and (B) 2  $\mu$ g/mL.



Immunocytochemistry of DLK1 in HepG2 cells with DLK1 antibody at 2.5  $\mu$ g/ml.





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

# DLK1 Antibody - 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.

## **DLK1 Antibody - 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.