

# DLK (Lc-12): sc-80024

## BACKGROUND

The human DLK gene maps to human chromosome 14q32.2 and encodes a 383 amino acid protein. DLK, also designated preadipocyte factor 1 (pref-1), ZOG, pG2 or FA1, is a transmembrane protein with six tandem EGF-like repeats in the putative extracellular domain, which is characteristic of the EGF-like protein family. DLK shares homology with invertebrate homeotic proteins, including Delta and Notch, which are proteins that mediate normal neural differentiation in *Drosophila*. In mammalian preadipocytes, multiple discrete forms of DLK protein are present due to N-linked glycosylation. DLK is expressed in tumors with neuroendocrine features, such as neuroblastoma and pheochromocytoma cell lines. Normal tissue expression is restricted to the adrenal gland and placenta. Protein-protein interaction between DLK proteins belonging to the same or to different cells, or the interaction between soluble and membrane DLK variants, may be important in regulation of DLK function.

## REFERENCES

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4. Lee, Y.L., et al. 1995. DLK, pG2 and pref-1 mRNAs encode similar proteins belonging to the EGF-like superfamily. Identification of polymorphic variants of this RNA. *Biochim. Biophys. Acta* 1261: 223-232.
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## CHROMOSOMAL LOCATION

Genetic locus: DLK1 (human) mapping to 14q32.2.

## SOURCE

DLK (Lc-12) is a mouse monoclonal antibody raised against an extracellular domain of DLK of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

## APPLICATIONS

DLK (Lc-12) is recommended for detection of DLK of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells); may cross-react with DLK of mouse origin.

Suitable for use as control antibody for DLK siRNA (h): sc-39669, DLK shRNA Plasmid (h): sc-39669-SH and DLK shRNA (h) Lentiviral Particles: sc-39669-V.

Molecular Weight of DLK isoforms: 45-60 kDa.

Positive Controls: JAR cell lysate: sc-2276.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



See **DLK (B-7): sc-376755** for DLK antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647.