

#2069 Store at -20C

DLK1 Antibody

Cell Signaling
TECHNOLOGY®Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

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cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M	Transfected Only	41	Rabbit	#P80370	8788

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

DLK1 Antibody detects transfected levels of total DLK1 protein.

Species predicted to react based on 100% sequence homology:

Rat

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to a residues surrounding Met371 of human DLK1. Antibodies are purified by protein A and peptide affinity chromatography.

Background

DLK1 (delta-like-1), also known as fetal antigen 1 (FA1) and preadipocyte factor 1 (pref-1), is a member of the epidermal growth factor (EGF)-like family of proteins, containing six tandem EGF-like repeats (1,2). DLK1 is a paternally expressed, imprinted gene that plays an important role in normal development and in the maintenance of homeostasis of adipose tissue mass (3). DLK1 deficient mice display growth retardation, obesity, skeletal malformation, and increased serum lipid metabolites (4). It has been reported that the ectodomain of DLK1 is shredded from the cell surface and inhibits adipocyte differentiation (5-7).

Background References

1. Laborda, J. et al. (1993) *J Biol Chem* 268, 3817-20.
2. Smas, C.M. and Sul, H.S. (1993) *Cell* 73, 725-34.
3. Kobayashi, S. et al. (2000) *Genes Cells* 5, 1029-37.
4. Moon, Y.S. et al. (2002) *Mol Cell Biol* 22, 5585-92.
5. Smas, C.M. et al. (1997) *Mol Cell Biol* 17, 977-88.
6. Mei, B. et al. (2002) *Biochem J* 364, 137-44.
7. Wang, Y. et al. (2006) *J Nutr* 136, 2953-6.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting IP: Immunoprecipitation

Cross-Reactivity Key

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster
X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse
GP: Guinea Pig Rab: rabbit All: all species expected

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