## For Research Use Only

## DLK1 Monoclonal antibody

Catalog Number: 67923-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

67923-1-lg BC007741 Protein G purification GeneID (NCBI): Size: CloneNo.:

150ul, Concentration: 1000 ug/ml by 8788 2C3H8 Nanodrop:

**UNIPROT ID:** Recommended Dilutions: P80370 WB 1:1000-1:6000 Mouse IHC 1:2000-1:8000 Full Name:

Isotype: delta-like 1 homolog (Drosophila)

lgG1 Calculated MW:

Immunogen Catalog Number: 41 kDa AG30916 Observed MW:

45-60 kDa

**Applications** 

**Tested Applications:** WB, IHC, ELISA

Species Specificity: Human, Pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Positive Controls:** 

WB: JAR cells, human placenta tissue, pig adrenal

**Purification Method:** 

gland tissue, NCCIT cells

IHC: human pancreas cancer tissue,

## **Background Information**

DLK1, also named PREF1, FA1, or pG2, is a transmembrane protein belonging to the epidermal growth factor (EGF)like superfamily (PMID: 8095043). It contains six EGF-like repeats in the extracellular region. DLK1 is abundant in preadipocytes and regulate adipocyte differentiation negatively (PMID: 8500166). Deficiency of DLK1 gives rise to  $growth\ retardation\ and\ accelerated\ adiposity\ in\ mouse\ model.\ Expression\ of\ DLK1\ is\ found\ in\ tumors\ with$  $neuroendocrine\ features\ that\ implies\ DLK1\ may\ be\ involved\ in\ neuroendocrine\ differentiation\ (PMID:\ 8095043).\ It$ has been reported overexpression of DLK1 could lead to the development of metabolic abnormalities by impairment of adipocyte function in mice (PMID: 12588883). The gene of DLK1 maps to chromosome 14q32, and encodes a 383-amino acid protein with a calculated molecular mass of 41 kDa. In preadipocytes, multiple discrete forms of DLK1 protein of 45-60 kDa are present, owing in part to N-linked glycosylation (PMID: 8500166).

Storage

Storage:

Store at -20°C.

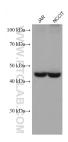
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

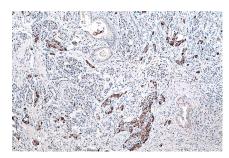
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

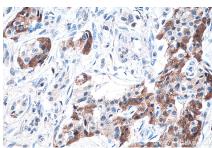
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 67923-1-1g (DLK1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 67923-1-Ig (DLK1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 67923-1-Ig (DLK1 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).