abcam

ab119930

Anti-DLK-1 antibody [3A10]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human DLK1 aa 150-350. The exact immunogen used to generate this antibody is proprietary information. Database link P80370
Clone number	3A10
Purification technique	Affinity purification Protein G
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	1/200 - 1/400

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Synthetic peptide, Recombinant full length protein
Dilution info	-
Notes	-

ELISA

Tested

Species	Synthetic peptide
Dilution info	1/10000
Notes	-

Expected

Species	Mouse, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant full length protein
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant full length protein
Dilution info	1/500 - 1/2000
Notes	-

Expected

Species	Mouse, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Synthetic peptide
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Synthetic peptide, Recombinant full length protein
Dilution info	-

Notes	-

Target data

See full target information DLK1

Function	May have a role in neuroendocrine differentiation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Delta-like 1 homolog (DLK-1) also known as Pref-1 (preadipocyte factor 1) is a protein involved in a wide range of cellular processes. The mass of DLK-1 is approximately 65 kDa. This protein is expressed in various tissues including the liver brain and endocrine glands. DLK-1 has an important role in the regulation of cell differentiation and growth acting as a signal molecule that influences tissue development and regeneration.
Biological function summary	DLK-1 serves a function in the inhibition of adipocyte differentiation and the maintenance of preadipocyte phenotype. It does not form part of a complex but interacts with membrane-bound receptors to mediate signaling pathways that impact tissue development. Researchers study its role in embryonic development and its downregulation is a significant factor during the differentiation of mesenchymal cells. Due to these interactions DLK-1 has a pivotal involvement in processes governing tissue regeneration and growth control.
Pathways	Better understanding of DLK-1 involves examining its interaction in the Notch signaling pathway. This important pathway related to cell fate decisions features pathways with other proteins like Notch-1 and Notch-3. The relationship helps modulate the fate and proliferation of cells. DLK-1 also has associations with pathways involving phosphoinositide 3-kinase (PI3K) which influences cell growth and survival through related proteins such as AKT.

Associated diseases and disorders	DLK-1 has shown associations with cancer and metabolic disorders. Overexpression of DLK-1 is linked to obesity due to its impact on preadipocyte differentiation. Additionally higher levels of DLK-1 can correlate with certain cancer progression where it acts alongside proteins like Notch-1 in promoting tumor cell growth. Understanding DLK-1's role in these contexts highlights the importance of DLK-1 as both a diagnostic marker and potential therapeutic target.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

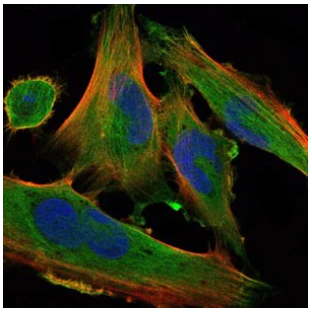
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

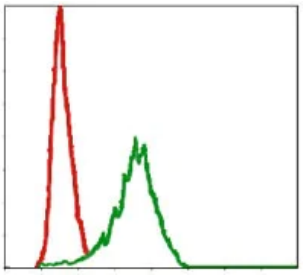
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-DLK-1 antibody [3A10] (ab119930)

DLK-1 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-DLK-1 antibody

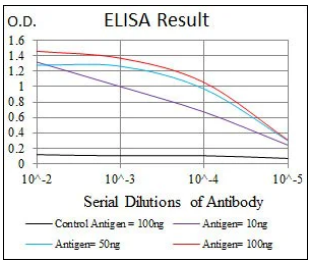
Immunofluorescence analysis of U251 cells using ab119930 at 1/200 dilution (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow Cytometry - Anti-DLK-1 antibody [3A10] (ab119930)

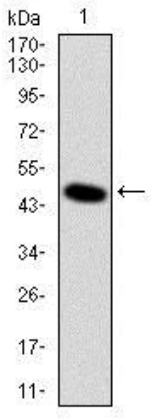
DLK-1 Flow Cytometry staining using mouse Anti-DLK-1 antibody

Flow cytometric analysis of NIH3T3 cells using ab119930 at 1/200 dilution (green) and negative control (red).



ELISA - Anti-DLK-1 antibody [3A10] (ab119930)

ELISA using ab119930.



Western blot - Anti-DLK-1 antibody [3A10] (ab119930)

All lanes:
Western blot - Anti-DLK-1 antibody [3A10] (ab119930) at 1/500 dilution

All lanes:
Recombinant DLK-1 protein

Predicted band size: 21 kDa, 25 kDa, 31 kDa, 37 kDa, 39 kDa, 41 kDa, 68 kDa, 84 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.