

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to DLK1

Format: PURE RUO REF IQP-1648P Volume: 0.1ml



Description

Clone	3A10
Isotype	Mouse IgG1
Specificity	DLK1
Alternative names	DLK; FA1; ZOG; pG2; PREF1; Pref-1
Species	Human,
Immunogen	Purified recombinant fragment of human DLK1 expressed in E. Coli.
Mw	41kDa
Format	Ascitic fluid containing 0.03% sodium azide.

Summary This gene encodes a transmembrane protein containing six epidermal growth factor repeats. The protein is involved in the differentiation of several cell types, including adipocytes; it is also thought to be a tumor suppressor. It is one of several imprinted genes located in a region of on chr 14q32. Certain mutations in this imprinted region can cause phenotypes similar to maternal and paternal uniparental disomy of chromosome 14 (UPD14). This gene is expressed from the paternal allele. A polymorphism within this gene has been associated with child and adolescent obesity. The mode of inheritance for this polymorphism is polar overdominance; this non-Mendelian inheritance pattern was first described in sheep with the callipyge phenotype, which is characterized by muscle hypertrophy and decreased fat mass.

Applications Western Blotting: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: Propose dilution 1/10000. Not yet tested in other applications. Determining optimal working dilutions by titration test.

Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.



Handling and Storage

Antibodies are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.03% sodiumazide (NaN₃) or as ascetic fluid containing 0.03% sodiumazide. Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.

Warning

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

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- References** 1. Epigenetics. 2009 Oct 1;4(7):469-75.
2. Mol Biol Cell. 2009 Jul;20(14):3353-62.
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Explanation of used symbols



REF

Consult instructions for use



Catalogue number



Sufficient for



Caution, consult accompanying document



Keep away from (sun)light



Biological risks



Temperature limitation (°C)

RUO

For Research Use Only

LOT

Batch code



Use by yyyy-mm-dd



Manufacturer

EC/REP

Authorized Representative in the European Community



Conformité Européenne (European Conformity)

		Label - tandem	Ex -max (nm)	Em -max (nm)
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



IQ Products BV

Rozenburglaan 13a
9727 DL Groningen, The Netherlands

- +31 (0)50 57 57 000
 +31 (0)50 57 57 002
 Technical marketing@iqproducts.nl
 Orders orders@iqproducts.nl
 www.iqproducts.nl