

Product datasheet for AM26511RP-N

Dlk1 Rat Monoclonal Antibody [Clone ID: 24-11]

Product data:

Product Type: Primary Antibodies

Clone Name: 24-11
Applications: FC

Recommended Dilution: Flow Cytometry: 20 µl (ready for use).

For details See Protocol below.

Reactivity: Mouse

Host: Rat lgG1

Clonality: Monoclonal

Immunogen: Pref-1-Fc protein

Specificity: This antibody reacts with Dlk.

Formulation: 1 ml PBS

Label: PE

State: Liquid purified Ig fraction

Stabilizer: 1% BSA

Preservative: 0.09% Sodium Azide

Purification: Protein G Agarose Chromatography of hybridoma supernatant

Conjugation: PE

Storage: Store undiluted at 2-8 °C.

Stability: Shelf life: one year from despatch.

Gene Name: delta-like 1 homolog (Drosophila)

Database Link: Entrez Gene 13386 Mouse

Q09163

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Background:

Delta like protein (Dlk), also known as Preadipocyte factor-1 (Pref-1) or zona glomerulosa-specific factor (ZOG), is an EGF-like transmembrane protein expressed preadipocytes but not in mature adipocytes. It is highly expressed in fetal liver, the adrenal gland, and placenta, as well as some neuroendocrine tumors and small cell lung carcinomas, where it plays a role in differentiation and proliferation. Dlk positively and negatively regulates adipocyte differentiation via at least four major variants (45-60 kDa) of Dlk generated by alternatively splicing. Constitutive expression of Dlk inhibits adipogenesis, but insulin or insulin like growth factor-1 (IGF-1) can circumvent this inhibition. Regulated processing of Dlk releases a 50 kDa soluble form that was previously characterized as Fetal Antigen-1, a protein involved in pancreatic island cell differentiation.

Synonyms:

DLK-1, DLK, Protein delta homolog 1, pG2, PREF1, Preadipocyte factor 1

Note:

This product was originally produced by MBL International.

Protocol:

Flow Cytometric analysis for floating cells

We usually use Fisher tubes or equivalents as reaction tubes for all steps described below. 1) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) and

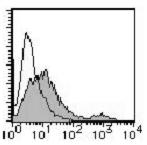
0.09% Sodum Azide.

2) Resuspend the cells with washing buffer (1 x 10° cells/mL).

- 3) Add 100 μ l of the cell suspension into each tube, and centrifuge at 500 x g for 1 minute at room temperature (20~25°C). Remove supernatant by careful aspiration.
- 4) Add 10 μ l of normal goat serum containing 0.09% Sodium Azide to the cell pellet after tapping. Mix well and incubate for 5 minutes at room temperature.
- 5) Add 20 μ l of the PE labeled anti-Dlk (24-11) to the each tube. Mix well and incubate for 15 minutes at room temperature.
- 6) Add 1 ml of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
- 7) Resuspend the cells with 500 µl of the washing buffer and analyze by a flow cytometer. <u>Positive Control for Flow Cytometry</u>: Mouse fetal hepatocytes, E14.5

Product images:





Flow cytometric analysis of Dlk expression on mouse Fetal Hepatocytes. Open histogram indicates the reaction of isotypic control to the cells. Shaded histogram indicates the reaction of AM26511RP-N to the cells.