



PRODUCT DATA SHEET

Product: Anti-DLC1 (Dynein Light Chain 1) mAb, clone 10D6

Cat. No.: MC-281 (100 µg)

Background:

The 10 kDa dynein light chain 1 (DLC1; LC8), also known as neuronal nitric oxide synthase inhibitory protein or PIN (protein inhibitor of nNOS), is a component of cytoplasmic dynein, which is involved in the minus end-directed movement of organelles along microtubules. It is a highly conserved protein that is associated with the microtubular dynein motor complex by its binding to dynein intermediate chain (DIC). This allows DLC1 to act as a cargo protein, hooking many different proteins to the dynein motor complex. Binding of the BH3-only protein, Bim, to DLC1 also controls its pro-apoptotic activity. In healthy cells, most Bim molecules are sequestered from Bcl-2 and its homologs by DLC1 mediated binding to the dynein motor complex. Certain apoptotic signals, such as cytokine withdrawal or deregulated calcium flux, induces the release of Bim and DLC1 from the dynein motor complex. This allows Bim and DLC1 to translocate and bind to Bcl-2 and its homologs, thus neutralizing their anti-apoptotic activity.

Specificity:

Recognizes human and mouse DLC1. Does not cross-react with DLC2.

Species Reactivity:

Mouse and human. Others not tested.

Ig Isotype:

Rat IgM.

Immunogen:

Recombinant mouse DLC1 [LC8, PIN].

Format:

100 µg affinity purified antibody in PBS containing 0.02% sodium azide. Concentration: 1 mg/mL.

Storage:

Store at 4°C for short term. Store at -20°C for long term. Aliquot to avoid multiple freeze/thaw cycles.

Applications and Suggested Dilutions:

- Flow Cytometry.
- Western blot: use at least a 1:1,000 dilution.

The optimal dilution for a specific application should be determined by the researcher.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.