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Anti-LDB1 (CLIM2) (RABBIT) Antibody

LDB1 Antibody
Catalog # ASR5191

Specification

Anti-LDB1 (CLIM2) (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Mouse**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This affinity purified antibody has been tested for use in ELISA, western blot and CHIP. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 43 kDa in size corresponding to LDB1 by western blotting in the appropriate cell lysate or extract. This antibody has been used in a ChIP assay using murine erythroleukemia (MEL) cells. The test sequence was the upstream enhancer of the GATA-1 gene; a putative LDB1 binding region as suggested by Orkin et al. Anti-LDB1 was used successfully in ChIP assays to precipitate a roughly 4-fold enrichment at the GATA1-HS1 enhancer element in DMSO-induced murine erythroleukemia cells. We suggest using 20 µg for 10E8 cells for ChIP.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-Terminal region of mouse LDB1 protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-LDB1 (CLIM2) (RABBIT) Antibody - Additional Information

Gene ID 16825

Other Names
16825

Purity
This affinity purified antibody is directed against the mouse LDB1protein. The product was affinity

purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from mouse, human, chimpanzee, dog, frog, chicken and rat based on 100% homology for the immunogen sequence. Cross reactivity with LDB1 homologues from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-LDB1 (CLIM2) (RABBIT) Antibody - Protein Information

Name Ldb1

Synonyms Nli

Function
Binds to the LIM domain of a wide variety of LIM domain- containing transcription factors (PubMed:8918878, PubMed:9192866). May regulate the transcriptional activity of LIM-containing proteins by determining specific partner interactions (PubMed:16815859, PubMed:18539116, PubMed:8918878, PubMed:9192866, PubMed:9315627). Plays a role in the development of interneurons and motor neurons in cooperation with LHX3 and ISL1 (PubMed:12150931, PubMed:18539116, PubMed:8876198). Acts synergistically with LHX1/LIM1 in axis formation and activation of gene expression (PubMed:8918878). Acts with LMO2 in the regulation of red blood cell development, maintaining erythroid precursors in an immature state (PubMed:9391090).

Cellular Location
Nucleus Note=Colocalizes with SLK at leading edges (PubMed:19675209)

Tissue Location
Expressed in multiple adult tissues including heart, brain, liver, kidney, testis, lung and muscle, with expression highest in the pituitary gland and skin.

Anti-LDB1 (CLIM2) (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot

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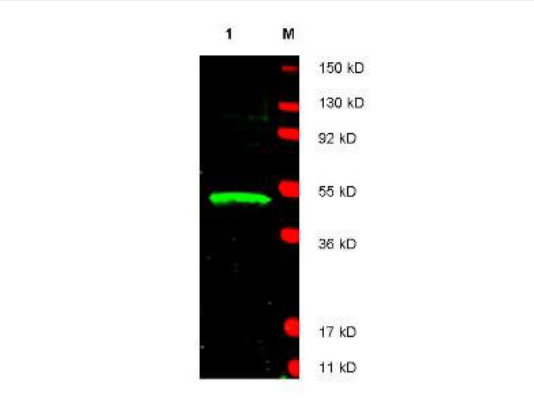
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-LDB1 (CLIM2) (RABBIT) Antibody - Images



Western blot using Rockland's affinity purified anti-LDB1 antibody shows detection of LDB1 protein in Jurkat whole cell lysate (W09-001-370). Approximately 30 µg of lysate was loaded prior to separation and transfer to nitrocellulose. Primary antibody was used at a 1:1,800 dilution in 5% BLOTTO (p/n B501-0500) in PBS reacted overnight at 4°C. The membrane was washed and reacted with a 1:20,000 dilution of DyLight™800 conjugated Gt-a-Rabbit IgG [H&L] MX (p/n 611-145-122) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red). Fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Anti-LDB1 (CLIM2) (RABBIT) Antibody - Background

LDB1 is also known as CLIM 2, LIM Domain Binding 1, NLI and Nuclear LIM Domain Interactor. The LIM-domain binding protein binds to the LIM domain of LIM homeodomain proteins which are transcriptional regulators of development. Nuclear LIM interactor (NLI) / LIM domain-binding protein 1 (LDB1) is located in the nuclei of neuronal cells during development, it is co-expressed with Isl1 in early motor neuron differentiation and has a suggested role in the Isl1 dependent development of motor neurons. It is suggested that these proteins act synergistically to enhance transcriptional efficiency by acting as co-factors for LIM homeodomain and Otx class transcription factors, both of which have essential roles in development.