



Rabbit Anti-LDB1 antibody

SL11868R

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| Product Name: | LDB1 |
| Chinese Name: | 神经细胞特异性转录因子LDB1抗体 |
| Alias: | Carboxyl Terminal LIM Domain Binding 2; Carboxyl-terminal LIM domain-binding protein 2; CLIM 2; CLIM-2; hLdb1; LDB-1; ldb1; LDB1_HUMAN; LIM Domain Binding 1; LIM domain binding factor CLIM2; LIM domain-binding factor CLIM2; LIM domain-binding protein 1; NLI; Nuclear LIM Domain Interactor; Nuclear LIM interactor antibodyxldb1. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Chicken,Dog,Horse, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 47kDa |
| Cellular localization: | The nucleus |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human LDB1/CLIM-2:10-100/411 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | The LIM-only (LMO) proteins, LMO1 and LMO2, are nuclear factors that are characterized by a conserved LIM domain. The LIM domain consists of a cysteine-rich zinc-binding motif that is present in a variety of transcription factors, including the LIM |

homeobox (LHX) proteins expressed in the central nervous system and involved in cell differentiation. LMO1 and LMO2 are expressed in the adult CNS in a cell type-specific manner, where they are differentially regulated by neuronal activity and are involved in regulating the cellular differentiated phenotype of neurons. LMO2 lacks a specific DNA-binding homeobox domain but rather assembles into transcriptional regulatory complexes to mediate gene expression by interacting with the widely expressed nuclear LIM interactor (NLI). NLI, known also as CLIM-1, and the related protein CLIM-2, facilitate the formation of heteromeric LIM complexes and also enhance the nuclear retention of LIM proteins. LMO2 and the related protein LMO4 are expressed in thymic precursor cells. LMO4 is also expressed in mature T cells, cranial neural crest cells, somite, dorsal limb bud mesenchyme, motor neurons, and Schwann cell progenitors.

Function:

Binds to the LIM domain of a wide variety of LIM domain-containing transcription factors. May regulate the transcriptional activity of LIM-containing proteins by determining specific partner interactions. May play a role in the development of motor neurons. Acts synergistically with LHX1/LIM1 in axis formation and activation of gene expression. Acts with LMO2 in the regulation of red blood cell development, maintaining erythroid precursors in an immature state.

Subunit:

Forms homodimers and heterodimers. Interacts with and activates LHX1/LIM1. Interacts with the LIM domains of ISL1 and LMO2. Can assemble in a complex with LMO2 and TAL1/SCL but does not interact with TAL1/SCL directly. Strongly interacts with the LIM2 domain of LMX1A and more weakly with the LIM1 domain. Homodimerization is not required for, and does not effect, LMX1A-binding. Component of a nuclear TAL-1 complex composed at least of CBFA2T3, LDB1, TAL1 and TCF3. Interacts with LHX6 and LHX9 (By similarity). Interacts with ESR1.

Subcellular Location:

Nucleus.

Tissue Specificity:

Expressed in a wide range of adult tissues including brain, heart, skeletal muscle, colon, thymus, spleen, kidney, liver, small intestine, lung and peripheral blood leukocytes.

Post-translational modifications:

Ubiquitinated by RLIM/RNF12, leading to its degradation by the proteasome.

Similarity:

Belongs to the LDB family.

SWISS:

Q86U70

Gene ID:

8861

Database links:

[Entrez Gene: 8861](#) Human

[Entrez Gene: 16825](#) Mouse

[GenBank: 26002](#) Human

[GenBank: NM_003893](#) Human

[GenBank: NM_010697](#) Mouse

[Omim: 603451](#) Human

[SwissProt: Q86U70](#) Human

[SwissProt: P70662](#) Mouse

[Unigene: 454418](#) Human

[Unigene: 327442](#) Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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