

Doublecortin Rabbit mAb

Catalog No.: A30048**Recombinant**

Basic Information

Observed MW

40 kDa

Calculated MW

40 kDa

Category

Monoclonal Antibodies

Applications

WB, IF-F, IHC-P, ELISA

Cross Reactivity

Mouse

Clone No.

ARC4017

Background

This gene encodes a member of the doublecortin family. The protein encoded by this gene is a cytoplasmic protein and contains two doublecortin domains, which bind microtubules. In the developing cortex, cortical neurons must migrate over long distances to reach the site of their final differentiation. The encoded protein appears to direct neuronal migration by regulating the organization and stability of microtubules. In addition, the encoded protein interacts with LIS1, the regulatory gamma subunit of platelet activating factor acetylhydrolase, and this interaction is important to proper microtubule function in the developing cortex. Mutations in this gene cause abnormal migration of neurons during development and disrupt the layering of the cortex, leading to epilepsy, cognitive disability, subcortical band heterotopia ("double cortex" syndrome) in females and lissencephaly ("smooth brain" syndrome) in males. Multiple transcript variants encoding different isoforms have been found for this gene.

Recommended Dilutions

WB 1:5000 - 1:30000**IF-F** 1:200 - 1:800**IHC-P** 1:1500 - 1:6000**ELISA**

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000), a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID

1641

Swiss-Prot

O43602

Immunogen

This information is considered to be commercially sensitive.

Synonyms

DC; DBCN; LISX; SCLH; XLIS; Doublecortin

Contact

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Product Information

Source

Rabbit

Isotype

IgG

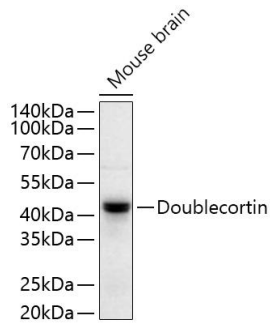
Purity

Affinity purification

Storage

Store at -20°C

Validation Data



Western blot analysis of lysates from Mouse brain using Doublecortin Rabbit mAb (A30048) at 1:10000 dilution incubated overnight at 4°C.

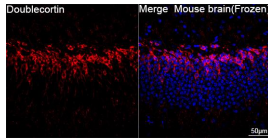
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

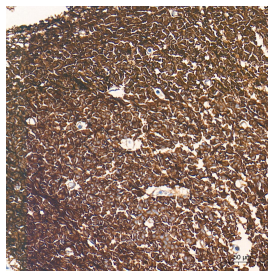
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 20 s.



Confocal imaging of frozen sections of Mouse brain tissue using Doublecortin Rabbit mAb (A30048, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Immunohistochemistry analysis of paraffin-embedded E14.5 mouse embryos tissue using Doublecortin Rabbit mAb (A30048) at a dilution of 1:1500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.