

## Datasheet for ABIN968637

# anti-Doublecortin antibody (AA 211-317)

1 Image 3 Publications

50 μg



Go to Product page

| _   |    |    |     |   |
|-----|----|----|-----|---|
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|     |    |    |     |   |

Quantity:

| Target: Doublecorting Binding Specificity: AA 211-317 Reactivity: Mouse Host: Mouse Clonality: Monoclonal Conjugate: This Double |  |  |
|--|--|--|
| Reactivity: Mouse  Host: Mouse  Clonality: Monoclonal  |  |  |
| Host: Mouse  Clonality: Monoclonal   |  |  |
| Clonality: Monoclonal  |  |  |
|  |  |  |
| Conjugate: This Double   |  |  |
|  | This Doublecortin antibody is un-conjugated  |  |
| Application: Western Blo   | Western Blotting (WB), Immunofluorescence (IF)   |  |
| Product Details  |  |  |
| Immunogen: Mouse Doub  | Mouse Doublecortin aa. 211-317   |  |
| Clone: 30-Doubleco   | 30-Doublecortin  |  |
| Isotype: IgG1  |  |  |
| Characteristics: 1. Since app  | olications vary, each investigator should titrate the reagent to obtain optimal results. |  |
| 2. Please ref  | fer to us for technical protocols.   |  |
| 3. Caution: S  | Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide    |  |
| compounds  | in running water before discarding to avoid accumulation of potentially explosive        |  |
| deposits in p  |  |  |
| ,  |  |  |
| 4. Source of   | all serum proteins is from USDA inspected abattoirs located in the United States.        |  |
|  |  |  |

chromatography.

## **Target Details**

| Target:             | Doublecortin (DCX)  |  |  |
|---------------------|---|--|--|
| Alternative Name:   | Doublecortin (DCX Products)   |  |  |
| Background:         | The cerebral cortex is composed of multiple layers of neurons of distinct types and functions,    |  |  |
|                     | which perform in unison to orchestrate cognitive function. The formation of the cortex relies on  |  |  |
|                     | complex signaling mechanisms, which mediate the migration of newly formed neurons from            |  |  |
|                     | deep within the brain to the superficial regions. Defects in neuronal migration and disruption of |  |  |
|                     | the multi-layered cortex are apparent in conditions such as X-linked lissencephaly (XLIS) and     |  |  |
|                     | subcortical laminar heterotopia (SCLH) or double cortex (DC) syndrome. Mutations in the           |  |  |
|                     | doublecortin gene have been linked to these brain disorders. Doublecortin is highly expressed in  |  |  |
|                     | developing brain, primarily in migrating neurons. It is significantly homologous with the N-      |  |  |
|                     | terminal region of the product of the KIAA0369 gene, a protein that is also similar to the CaM    |  |  |
|                     | kinase family in its C-terminal region. Doublecortin has four potential MAP kinase family         |  |  |
|                     | phosphorylation sites and a putative site for Abl tyrosine phosphorylation. Thus, doublecortin is |  |  |
|                     | thought to be an integral component of tyrosine kinase signal transduction pathways that          |  |  |
|                     | regulate neuronal migration and development of the cerebral cortex.                               |  |  |
| Molecular Weight:   | 41 kDa  |  |  |
| Application Details |   |  |  |
| Comment:            | Related Products: ABIN967389  |  |  |
| Restrictions:       | For Research Use only   |  |  |
| Handling            |   |  |  |
| Format:             | Liquid  |  |  |
| Concentration:      | 250 μg/mL   |  |  |
| Buffer:             | Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.                     |  |  |
| Preservative:       | Sodium azide  |  |  |
| Precaution of Use:  | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which                     |  |  |
|                     | should be handled by trained staff only.  |  |  |
| Storage:            | -20 °C  |  |  |
| Storage Comment:    | Store undiluted at -20°C.   |  |  |

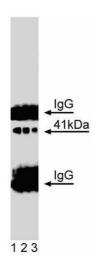
Product cited in:

Magavi, Leavitt, Macklis: "Induction of neurogenesis in the neocortex of adult mice." in: **Nature**, Vol. 405, Issue 6789, pp. 951-5, (2000) (PubMed).

des Portes, Pinard, Billuart, Vinet, Koulakoff, Carrié, Gelot, Dupuis, Motte, Berwald-Netter, Catala, Kahn, Beldjord, Chelly: "A novel CNS gene required for neuronal migration and involved in X-linked subcortical laminar heterotopia and lissencephaly syndrome." in: **Cell**, Vol. 92, Issue 1, pp. 51-61, (1998) (PubMed).

Gleeson, Allen, Fox, Lamperti, Berkovic, Scheffer, Cooper, Dobyns, Minnerath, Ross, Walsh: "Doublecortin, a brain-specific gene mutated in human X-linked lissencephaly and double cortex syndrome, encodes a putative signaling protein." in: **Cell**, Vol. 92, Issue 1, pp. 63-72, (1998) (PubMed).

#### **Images**



### **Western Blotting**

**Image 1.** Western blot analysis of Doublecortin on a mouse neonate lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-mouse Doublecortin antibody.