

# Datasheet for ABIN5708336

# anti-Doublecortin antibody (AA 74-100)





| Overview             |   |
|----------------------|---|
| Quantity:            | 100 μg  |
| Target:              | Doublecortin (DCX)  |
| Binding Specificity: | AA 74-100   |
| Reactivity:          | Human, Mouse, Rat   |
| Host:                | Rabbit  |
| Clonality:           | Polyclonal  |
| Application:         | Western Blotting (WB)   |
| Product Details      |   |
| Immunogen:           | Amino acids 74-100 (QSLRFHQNMELDFGHFDERDKTSRNMR-human) were used as the immunogen for the DCX antibody. |

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|---------------|---|
|               | immunogen for the DCX antibody.   |
| Isotype:      | IgG   |
| Purification: | Antigen affinity purified   |

### **Target Details**

| Target:           | Doublecortin (DCX)  |
|-------------------|---|
| Alternative Name: | Doublecortin / DBCN / DCX (DCX Products)  |
| Background:       | Neuronal migration protein Doublecortin, also known as Doublin or Lissencephalin-X, is a protein that in humans is encoded by the DCX gene. 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, mental retardation, 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.

UniProt:

043602

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### **Application Details**

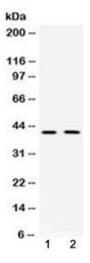
| Application Notes: | Optimal dilution of the DCX antibody should be determined by the researcher.\. Western blot: |
|--------------------|--|
|                    | 0.5-1 μg/mL  |

## Handling

Restrictions:

| Buffer:          | 0.5 mg/mL if reconstituted with 0.2 mL sterile DI water   |
|------------------|---|
| Storage:         | -20 °C  |
| Storage Comment: | After reconstitution, the DCX antibody can be stored for up to one month at 4°C. For long-term, |
|                  | aliquot and store at -20°C. Avoid repeated freezing and thawing.                                |

#### **Images**



#### **Western Blotting**

**Image 1.** Western blot testing of 1) rat brain and 2) mouse brain with DCX antibody at 0.5ug/ml. Predicted molecular weight: 40-50 kDa.