

**Doublecortin (DCX) Antibody**  
Mouse monoclonal antibody  
Catalog # AN1217

**Specification**

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**Doublecortin (DCX) Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">O43602</a>
Reactivity	Bovine, Human, Mouse, Rat
Host	Mouse
Clonality	monoclonal
Isotype	IgG2A
Calculated MW	35, 45 KDa

**Doublecortin (DCX) Antibody - Additional Information**

Gene ID	1641
Gene Name	DCX
<b>Other Names</b>	Neuronal migration protein doublecortin, Dublin, Lissencephalin-X, Lis-X, DCX, DBCN, LISX

**Target/Specificity**

Full length recombinant human protein expressed in and purified from E. coli.

**Dilution**

WB~~ 1:5000  
IF~~ 1:1000

**Format**

Affinity purified from tissue culture supernatant.

**Antibody Specificity**

Specific for the ~35 & 45 k doublecortin protein.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Doublecortin (DCX) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

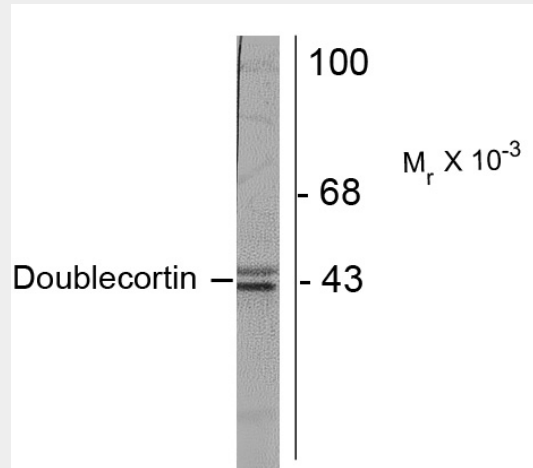
Blue Ice

**Doublecortin (DCX) Antibody - Protocols**

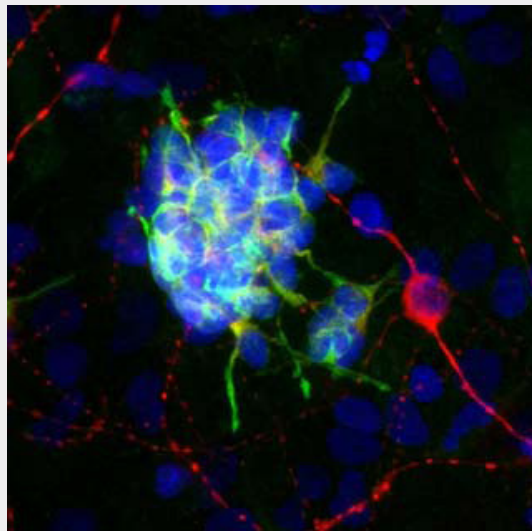
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Doublecortin (DCX) Antibody - Images



Western blot of postnatal day 3 rat brain lysate showing specific immunolabeling of the ~35 & 45k doublecortin protein.



Immunofluorescence of cultured rat neurons showing strong cytoplasmic staining of doublecortin (green) in developing neurons and GFAP in red.

### Doublecortin (DCX) Antibody - Background

Doublecortin, or DCX, is a microtubule associated protein that is expressed almost exclusively in very early neuronal development (Brown et al., 2003), making it an excellent marker for developing neuronal cells. Defects in the DCX gene lead to X-linked lissencephaly which is characterized by a lack of normal folds on the surface of the brain resulting in a smooth cerebral cortex caused by abnormal migration of neurons during development

(des Portes et al., 1998; Gleeson et al., 1998).

### **Doublecortin (DCX) Antibody - References**

Brown JP, Couillard-Després S, Cooper-Kuhn CM, Winkler J, Aigner L, Kuhn HG (2003) Transient expression of doublecortin during adult neurogenesis. *J Comp Neurol.* Dec 1;467(1):1-10.

des Portes V, Pinard JM, Billuart P, Vinet MC, Koulakoff A, CarriÃ© A, Gelot A, Dupuis E, Motte J, Berwald-Netter Y, Catala M, Kahn A, Beldjord C and Chelly J. (1998) A novel CNS gene required for neuronal migration and involved in X-linked subcortical laminar heterotopia and lissencephaly syndrome. *Cell* 92:51-61.

Gleeson JG, Allen KM, Fox JW, Lamperti ED, Berkovic S, Scheffer I, Cooper EC, Dobyns WB, Minnerath SR, Ross ME and Walsh CA. (1998) Doublecortin, a brain-specific gene mutated in human X-linked lissencephaly and double cortex syndrome, encodes a putative signaling protein. *Cell* 92:63-72.