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Doublecortin (DCX) Antibody
Mouse monoclonal antibody
Catalog # AN1217

Specification

Doublecortin (DCX) Antibody - Product Information

Application	**WB, IF**
Primary Accession	O43602
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**

Other Names
Neuronal migration protein doublecortin, Doublin, 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.

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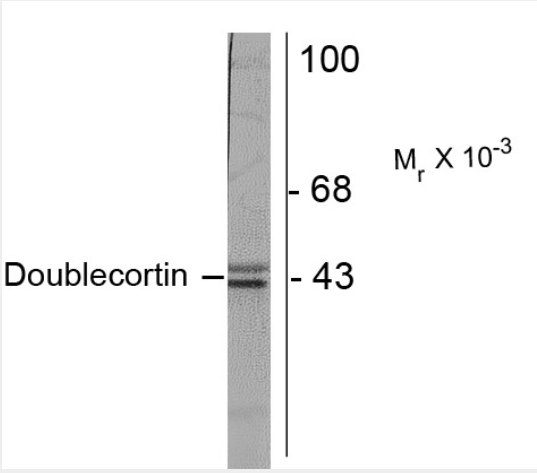
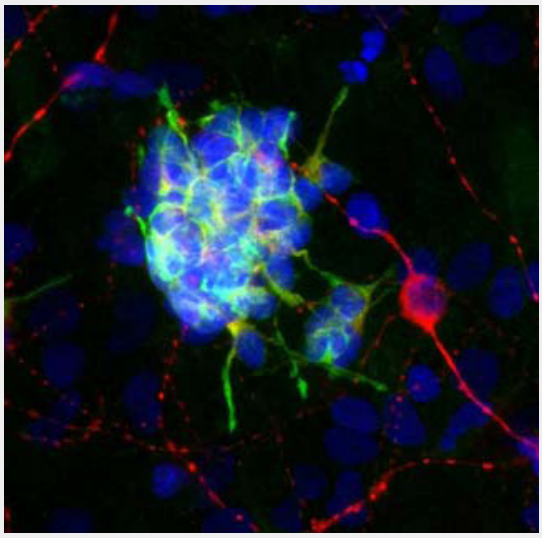
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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 cytoplasmicstaining 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.