

## Doublecortin

**Cat.No. 326 006; Polyclonal chicken antibody, 50 µg specific antibody (lyophilized)**

### Data Sheet

Reconstitution/ Storage	50 µg purified IgY, lyophilized. Ovalbumin was added for stabilization. For reconstitution add 50 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. <b>Before storing at -20°C add 1 vol of glycerol.</b>
Applications	<b>WB:</b> not tested yet <b>IP:</b> not tested yet <b>ICC:</b> not tested yet <b>IHC:</b> 1 : 2000 <b>IHC-P/FFPE:</b> 1 : 2000
Immunogen	Recombinant protein corresponding to AA 271 to 366 from mouse Doublecortin (UniProt Id: Q6PGI2)
Epitop	Epitop: AA 271 to 366 from mouse Doublecortin (UniProt Id: Q6PGI2)
Reactivity	Reacts with: mouse (Q6PGI2). Other species not tested yet.
Specificity	specific for Doublecortin

### Selected General References

Redirection of doublecortin-positive cell migration by over-expression of the chemokines MCP-1, MIP-1 $\alpha$  and GRO- $\alpha$  in the adult rat brain.  
Tang SK, Knobloch RA, Maucksch C, Connor B  
Neuroscience (2014) 260: 240-8.

Variability of doublecortin-associated dendrite maturation in adult hippocampal neurogenesis is independent of the regulation of precursor cell proliferation.  
Plümpe T, Ehninger D, Steiner B, Klempin F, Jessberger S, Brandt M, Römer B, Rodriguez GR, Kronenberg G, Kempermann G  
BMC neuroscience (2006) 7: 77.

Distinct roles of doublecortin modulating the microtubule cytoskeleton.  
Moores CA, Perderiset M, Kappeler C, Kain S, Drummond D, Perkins SJ, Chelly J, Cross R, Houdusse A, Francis F  
The EMBO journal (2006) 25(19): 4448-57.

Doublecortin is a developmentally regulated, microtubule-associated protein expressed in migrating and differentiating neurons.  
Francis F, Koulakoff A, Boucher D, Chafey P, Schaar B, Vinet MC, Friocourt G, McDonnell N, Reiner O, Kahn A, McConnell SK, et al.  
Neuron (1999) 23(2): 247-56.

Doublecortin, a brain-specific gene mutated in human X-linked lissencephaly and double cortex syndrome, encodes a putative signaling protein.  
Gleeson JG, Allen KM, Fox JW, Lamperti ED, Berkovic S, Scheffer I, Cooper EC, Dobyns WB, Minnerath SR, Ross ME, Walsh CA, et al.  
Cell (1998) 92(1): 63-72.

### TO BE USED IN VITRO / FOR RESEARCH ONLY

**NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

**Doublecortin** or **DCX** seems to be required for initial steps of neuronal dispersion and cortex lamination during cerebral cortex development. Mutations in the gene encoding this protein have been linked to the double cortex syndrome.

Doublecortin is highly expressed in neuronal cells of fetal brain but absent from other tissues. In the adult dentate gyrus it is only expressed in cells contributing to adult neurogenesis.