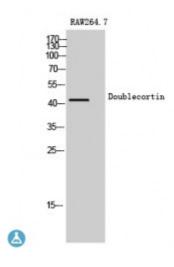


## **Anti-Doublecortin antibody**



**Description** Rabbit polyclonal to Doublecortin.

Model STJ92771

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IHC, WB

**Immunogen** Synthesized peptide derived from human Doublecortin around the non-

phosphorylation site of S378.

Immunogen Region 180-260 aa

Gene ID 1641
Gene Symbol DCX

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300ELISA 1:10000

**Specificity** Doublecortin Polyclonal Antibody detects endogenous levels of Doublecortin

protein.

**Tissue Specificity** Highly expressed in neuronal cells of fetal brain (in the majority of cells of the

cortical plate, intermediate zone and ventricular zone), but not expressed in other fetal tissues. In the adult, highly expressed in the brain frontal lobe, but very low expression in other regions of brain, and not detected in heart,

placenta, lung, liver, skeletal muscles, kidney and pancreas.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

**Protein Name** Neuronal migration protein doublecortin Doublin Lissencephalin-X Lis-X

Molecular Weight 44 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:2714OMIM:300067

Alternative Names Neuronal migration protein doublecortin Doublin Lissencephalin-X Lis-X

**Function** Microtubule-associated protein required for initial steps of neuronal dispersion

and cortex lamination during cerebral cortex development. May act by competing with the putative neuronal protein kinase DCLK1 in binding to a target protein. May in that way participate in a signaling pathway that is crucial for neuronal interaction before and during migration, possibly as part of a calcium ion-dependent signal transduction pathway. May be part with PAFAH1B1/LIS-1 of overlapping, but distinct, signaling pathways that

promote neuronal migration.

**Cellular Localization** Cytoplasm Cell projection. Localizes at neurite tips.

Post-translational

Modifications microtubules . Phosphorylation at Ser-265 and Ser-297 seems to occur only in

neonatal brain, the levels falling precipitously by postnatal day 21. Ubiquitinated by MDM2, leading to its degradation by the proteasome. Ubiquitinated by MDM2 and subsequent degradation leads to reduce the

Phosphorylation by MARK1, MARK2 and PKA regulates its ability to bind

dendritic spine density of olfactory bulb granule cells.

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