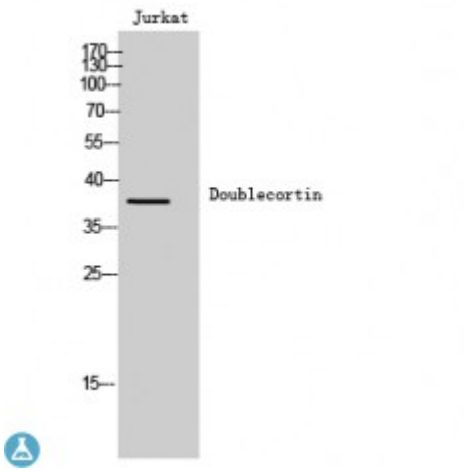
Anti-Doublecortin antibody



Description	Rabbit polyclonal to Doublecortin.

Model	STJ92770
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human Doublecortin around the non-phosphorylation site of S376.
Immunogen Region	320-400 aa
Gene ID	1641
Gene Symbol	DCX
Dilution range	WB 1:500-1:2000ELISA 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	38 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	Phosphorylation by MARK1, MARK2 and PKA regulates its ability to bind 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 dendritic spine density of olfactory bulb granule cells.