

Anti-Doublecortin Antibody

Catalog # AP95794

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	O43602
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	40574

Additional Information

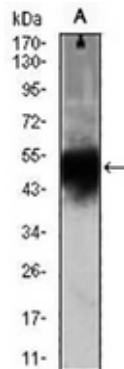
Gene ID	1641
Other Names	DBCN; LISX; Neuronal migration protein doublecortin; Dublin; Lissencephalin-X; Lis-X
Target/Specificity	Recombinant fusion protein of human Doublecortin expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

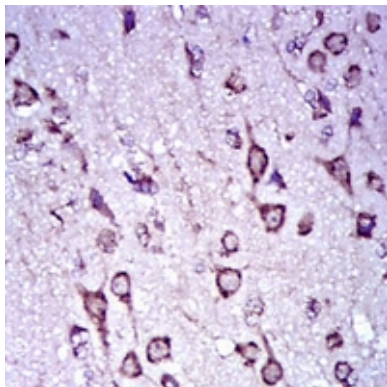
Name	DCX
Synonyms	DBCN, LISX
Function	Microtubule-associated protein required for initial steps of neuronal dispersion and cortex lamination during cerebral cortex development. May act by competing with the putative neuronal protein kinase DCLK1 in binding to a target protein. May in that way participate 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 Location	Cytoplasm. Cell projection, neuron projection {ECO:0000250 UniProtKB:Q9ESI7}. Note=Localizes at neurite tips. {ECO:0000250 UniProtKB:Q9ESI7}
Tissue Location	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

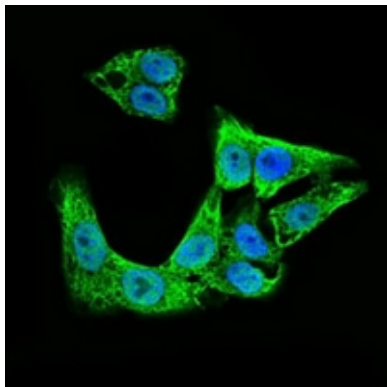
Images



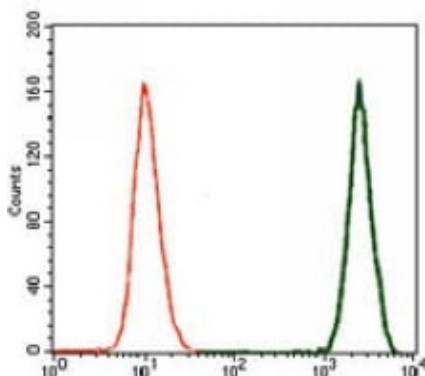
Western blot analysis of Doublecortin expression in mouse heart (A) whole cell lysates. (Predicted band size: 49 kD; Observed band size: 49 kD)



Immunohistochemical analysis of Doublecortin staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Doublecortin staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of SKNSH cells using Anti-Doublecortin Antibody (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.