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DCX Antibody (S128)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2768a

Specification

DCX Antibody (S128) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O43602
Other Accession	Q9ESI7, O88809
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**107-137**

DCX Antibody (S128) - Additional Information

Gene ID 1641

Other Names
Neuronal migration protein doublecortin, Doublin, Lissencephalin-X, Lis-X, DCX, DBCN, LISX

Target/Specificity
This DCX antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 107-137 amino acids from human DCX.

Dilution
WB~~1:1000
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
DCX Antibody (S128) is for research use only and not for use in diagnostic or therapeutic procedures.

DCX Antibody (S128) - 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}

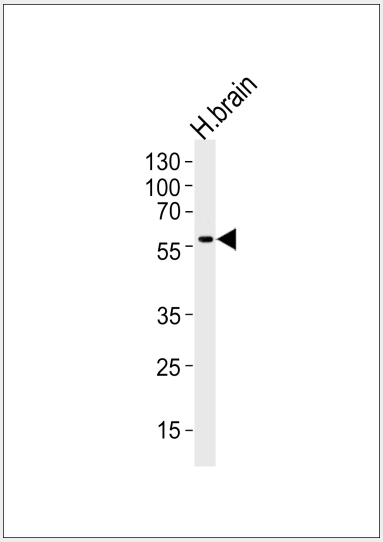
Tissue Location
Highly expressed in neuronal cells of fetal brain (in the majority of cells of the cortical plate, intermediate zone and ventricular zone), but not expressed in other fetal tissues. In the adult, highly expressed in the brain frontal lobe, but very low expression in other regions of brain, and not detected in heart, placenta, lung, liver, skeletal muscles, kidney and pancreas

DCX Antibody (S128) - Protocols

Provided below are standard protocols that you may find useful for product applications.

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

DCX Antibody (S128) - Images



Western blot analysis of lysate from human brain tissue lysate, using Phospho-DCX-S128. ctrl(Cat. #AP2768a). AP2768a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

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Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with DCX Antibody (S128) (Cat.#AP2768a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

DCX Antibody (S128) - Background

In the developing cortex, cortical neurons must migrate over long distances to reach the site of their final differentiation. DCX is a cytoplasmic protein which appears to direct neuronal migration by regulating the organization and stability of microtubules. It contains two doublecortin domains, which bind microtubules. In addition, this protein interacts with LIS1, the regulatory gamma subunit of platelet activating factor acetylhydrolase, and this interaction is important to proper microtubule function in the developing cortex. Mutations in the gene encoding DCX are a cause of X-linked lissencephaly.

DCX Antibody (S128) - References

Leger,P.L., Neurogenetics (2008)
Zhang,Y., Biochem. Biophys. Res. Commun. 363 (3), 694-700 (2007)