

# Doublecortin / DCX (aa232-242) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3487a

### **Specification**

# Doublecortin / DCX (aa232-242) Antibody (internal region) - Product Information

Application IHC, WB, IF Primary Accession 043602

Other Accession NP 000546.2, NP 835365.1, NP 835364.1,

NP 001182482.1, 1641, 13193 (mouse), 84394

<u>(rat)</u>

Reactivity

Predicted Human, Rat, Pig, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml

Isotype IgG Calculated MW 40574

### Doublecortin / DCX (aa232-242) Antibody (internal region) - Additional Information

#### **Gene ID 1641**

## **Other Names**

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

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Doublecortin / DCX (aa232-242) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## Doublecortin / DCX (aa232-242) Antibody (internal region) - 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**

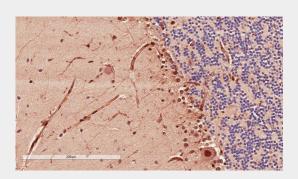
Highly expressed in neuronal cells of fetal brain (in the majority of cells of the cortical plate, intermediate zone and ventricular zone), but not expressed in other fetal tissues. In the adult, highly expressed in the brain frontal lobe, but very low expression in other regions of brain, and not detected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

### Doublecortin / DCX (aa232-242) Antibody (internal region) - Protocols

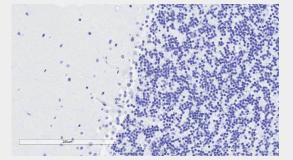
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Doublecortin / DCX (aa232-242) Antibody (internal region) - Images

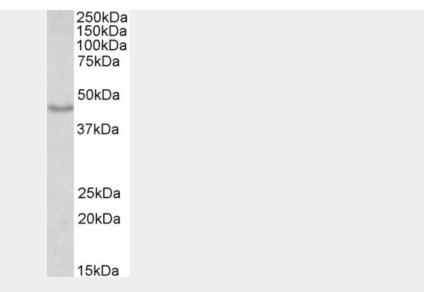


AF3487a (2μg/ml) staining of paraffin embedded Human Cerebellum. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining.

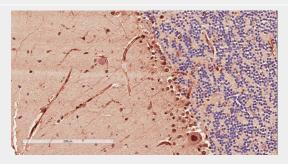


AF3487a Negative Control showing staining of paraffin embedded Human Cerebellum, with no primary antibody.

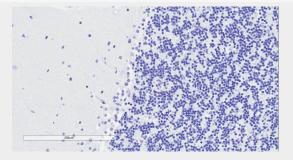




EB10781 ( $0.01\mu g/ml$ ) staining of Mouse fetal Brain lysate ( $35\mu g$  protein in RIPA buffer). Detected by chemiluminescence.

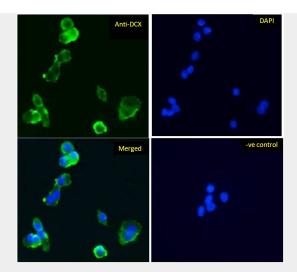


EB10781 (2μg/ml) staining of paraffin embedded Human Cerebellum. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining.

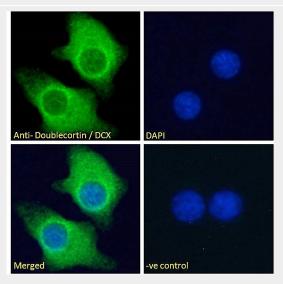


EB10781 Negative Control showing staining of paraffin embedded Human Cerebellum, with no primary antibody.





EB10781 Immunofluorescence analysis of paraformaldehyde fixed HepG2 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (5ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (b



EB10781 Immunofluorescence analysis of paraformaldehyde fixed KNRK cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (b

## Doublecortin / DCX (aa232-242) Antibody (internal region) - Background

This antibody is expected to recognize all four reported isoforms (NP\_000546.2; NP\_835365.1; NP\_835364.1; NP\_001182482.1). Reported variants represent identical protein: NP\_835364.1 and NP\_835366.1.

# Doublecortin / DCX (aa232-242) Antibody (internal region) - References

MiR-128 up-regulation inhibits Reelin and DCX expression and reduces neuroblastoma cell motility and invasiveness. Evangelisti C, Florian MC, Massimi I, Dominici C, Giannini G, Galardi S, BuÃ" MC, Massalini S, McDowell HP, Messi E, Gulino A, Farace MG, CiafrÃ" SA, The FASEB journal: official publication of the Federation of American Societies for Experimental Biology 2009 Dec 23 (12): 4276-87. PMID: 19713529