




# Anti-Doublecortin antibody ab113435

★★★★★ [2 Abreviews](#) [5 References](#) [3 Images](#)

### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Doublecortin antibody  |
| <b>Description</b>         | Goat polyclonal to Doublecortin   |
| <b>Host species</b>        | Goat  |
| <b>Specificity</b>         | ab113435 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.   |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, ICC/IF, IHC-P  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Human<br><b>Predicted to work with:</b> Horse, Cat, Dog, Pig    |
| <b>Immunogen</b>           | Synthetic peptide:<br>C-KTSANMKAPQS<br>, corresponding to internal sequence amino acids 151-161 of Human Doublecortin (NP_835365.1; NP_835364.1; NP_001182482.1.), or amino acids 232-242 of Human Doublecortin (NP_000546.2).<br><a href="#"> Run BLAST with</a> <a href="#"> Run BLAST with</a>   |
| <b>Positive control</b>    | IHC-P: Human cerebellum tissue. ICC/IF: HepG2 cells. WB: Mouse fetal Brain lysate.  |
| <b>General notes</b>       | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> |

### Properties

|                             |  |
|-----------------------------|--|
| <b>Form</b>                 | Liquid   |
| <b>Storage instructions</b> | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.            |
| <b>Storage buffer</b>       | pH: 7.30<br>Preservative: 0.02% Sodium azide<br>Constituents: 99% Tris buffered saline, 0.5% BSA |

|                           |   |
|---------------------------|---|
| <b>Purity</b>             | Immunogen affinity purified   |
| <b>Purification notes</b> | Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide. |
| <b>Clonality</b>          | Polyclonal  |
| <b>Isotype</b>            | IgG   |

## Applications

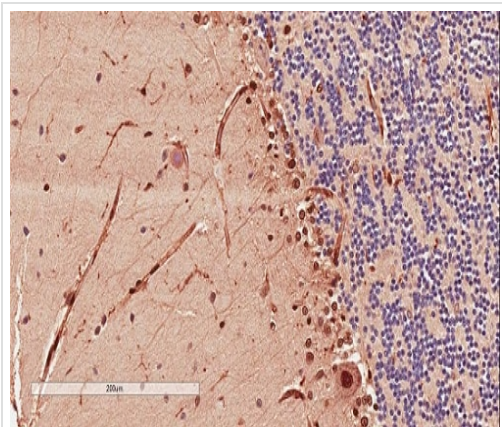
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab113435 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application   | Abreviews | Notes   |
|---------------|-----------|---|
| <b>WB</b>     |           | Use a concentration of 0.01 - 0.03 µg/ml. Detects a band of approximately 45 kDa (predicted molecular weight: 49 kDa). 1 hour primary incubation is recommended for this product. |
| <b>ICC/IF</b> |           | Use a concentration of 5 - 10 µg/ml.  |
| <b>IHC-P</b>  | ★★★★★ (2) | Use a concentration of 2 - 4 µg/ml.   |

## Target

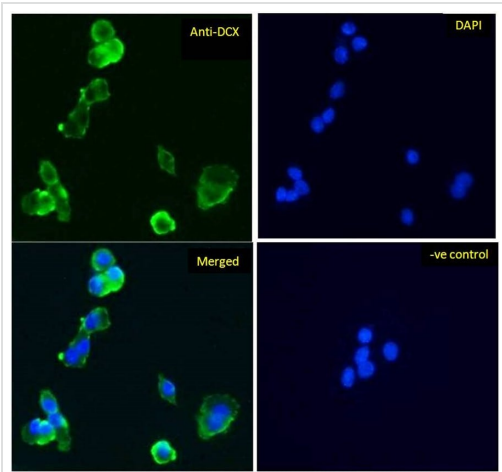
|                               |  |
|-------------------------------|--|
| <b>Function</b>               | Seems to be required for initial steps of neuronal dispersion and cortex lamination during cerebral cortex development. May act by competing with the putative neuronal protein kinase DCAMKL1 in 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 LIS-1 of an overlapping, but distinct, signaling pathways that promote neuronal migration.   |
| <b>Tissue specificity</b>     | 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.  |
| <b>Involvement in disease</b> | <p>Defects in DCX are the cause of lissencephaly X-linked type 1 (LISX1) [MIM:300067]; also called X-LIS or LIS. LISX1 is a classic lissencephaly characterized by mental retardation and seizures that are more severe in male patients. Affected boys show an abnormally thick cortex with absent or severely reduced gyri. Clinical manifestations include feeding problems, abnormal muscular tone, seizures and severe to profound psychomotor retardation. Female patients display a less severe phenotype referred to as 'doublecortex'.</p> <p>Defects in DCX are the cause of subcortical band heterotopia X-linked (SBHX) [MIM:300067]; also known as double cortex or subcortical laminar heterotopia (SCLH). SBHX is a mild brain malformation of the lissencephaly spectrum. It is characterized by bilateral and symmetric plates or bands of gray matter found in the central white matter between the cortex and cerebral ventricles, cerebral convolutions usually appearing normal.</p> <p>Note=A chromosomal aberration involving DCX is found in lissencephaly. Translocation t(X;2)(q22.3;p25.1).</p> |
| <b>Sequence similarities</b>  | Contains 2 doublecortin domains.   |

Images



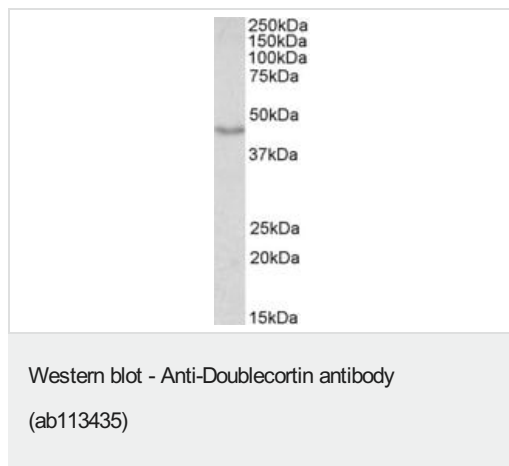
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Doublecortin antibody (ab113435)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebellum labeling Doublecortin with ab113435 at 2µg/ml. Microwaved antigen retrieval with citrate buffer pH 6, HRP-staining.



Immunocytochemistry/ Immunofluorescence - Anti-Doublecortin antibody (ab113435)

Immunofluorescent analysis of paraformaldehyde fixed HepG2 cells, permeabilized with 0.15% Triton, labeling Doublecortin with ab113435 at 5µg/ml, followed by Alexa Fluor 488® secondary antibody at 1ug/ml (Green). The nuclear stain is DAPI (blue). The negative control was performed using unimmunized goat IgG at 10µg/ml, followed by Alexa Fluor 488® secondary antibody at 1µg/ml.



Anti-Doublecortin antibody (ab113435) at 0.01 µg/ml + Mouse Fetal  
Brain lysate (in RIPA buffer) at 35 µg

Developed using the ECL technique.

**Predicted band size:** 49 kDa

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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