

Datasheet for 200-301-X04**Doublecortin Antibody****Overview**

Description:	Anti-Doublecortin (MOUSE) Monoclonal Antibody - 200-301-X04
Item No.:	200-301-X04
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat, Bovine
Host Species:	Mouse

Product Details

Background:	Doublecortin, or DCX, is a microtubule associated protein that is expressed almost exclusively in very early neuronal development, making it an excellent marker for developing neuronal cells. Defects in the DCX gene lead to X-linked lissencephaly which is characterized by a lack of normal folds on the surface of the brain resulting in a smooth cerebral cortex caused by abnormal migration of neurons during development. Doublecortin Antibody is ideal for researchers interested in neuroscience research.
Synonyms:	Neuronal migration protein doublecortin, Dublin, Lissencephalin-X, Lis-X, DBCN, LISX
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	3E1
Format:	IgG2a

Target Details

Gene Name:	DCX
Reactivity:	Human, Mouse, Rat, Bovine
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-Doublecortin Antibody was produced in mice by repeated immunizations with a full length recombinant human Doublecortin protein expressed in and purified from E. coli.

Purity/Specificity: Anti-Doublecortin Antibody was purified from tissue culture supernatant by protein G chromatography.

Relevant Links:

- [UniProtKB - O43602](#)
- [GeneID - 1641](#)
- [NCBI - NP_000546.2](#)

Application Details

Tested Applications: IHC, WB

Application Note: Anti-Doublecortin Antibody is tested for Western Blot, immunohistochemistry, and immunocytochemistry, it is specific for the ~35 & 45 kDa doublecortin protein. Specific conditions for reactivity should be optimized by the end user.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:50,000

IF: 1:1000

IHC: 1:1000

WB: 1:5000

Formulation

Physical State: Liquid (sterile filtered)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.01% (w/v) Sodium Azide

Stabilizer: 50% (v/v) Glycerol

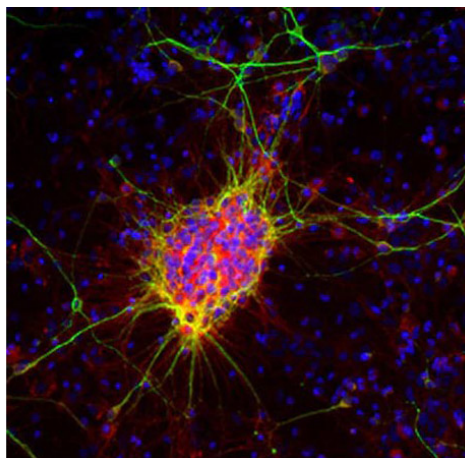
Shipping & Handling

Shipping Condition: Wet Ice

Storage Condition: Store vial at -20° C prior to opening in undiluted aliquots. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use.

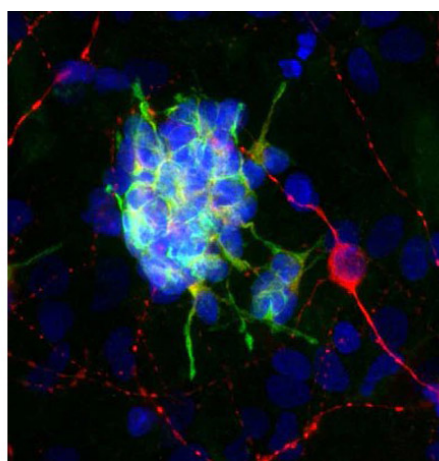
Expiration: Expiration date is one (1) year from date of receipt.

Images



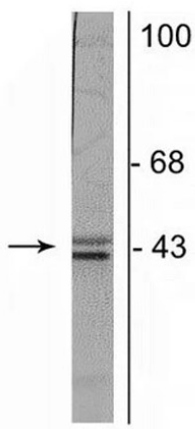
Immunofluorescence Microscopy

Immunofluorescence of rat cortical neuron-glia cells showing strong cytoplasmic labeling of a small population of developing neurons and their processes with Anti-Doublecortin (p/n 200-301-X04, 1:1000, red) while Anti-MAP2 (1:10,000, green) labels dendrites and perikarya or mature neurons, and additional nuclear staining was done with DAPI (blue). Anti-doublecortin is an excellent marker of early developing neuronal cells.



Immunofluorescence Microscopy

Immunofluorescence of cultured rat neurons showing strong cytoplasmic staining of Anti-doublecortin (p/n 200-301-X04, 1:1000, green) in developing neurons and GFAP (1:1000, red).



Western Blot

Western Blot of Anti-Doublecortin Antibody. Postnatal day 3 rat brain lysate showing specific immunolabeling of the ~35 kDa and ~45 kDa doublecortin protein.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.