

Doublecortin/DCX Monoclonal Antibody

catalog number: AN200080P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

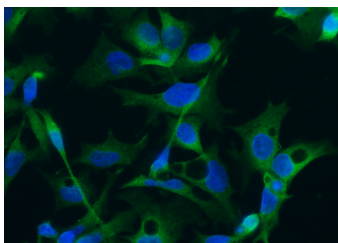
Reactivity	Human
Immunogen	Recombinant Human Doublecortin/DCX Protein
Host	Mouse
Isotype	IgG2a
Clone	2D7
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS with 10% Trehalose, 0.02% Tween 80, pH7.0

Applications

Recommended Dilution

ICC/IF	1:20-1:100
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Data



Immunofluorescence analysis of Human DCX in HepG2 cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with Mouse anti-Human DCX Monoclonal Antibody (1:60) at 37°C 1 hour. Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI for nuclear staining (blue). Positive staining was localized to cytoplasm.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

For Research Use Only

This gene encodes a member of the doublecortin family. The protein encoded by this gene is a cytoplasmic protein and contains two doublecortin domains, which bind microtubules. In the developing cortex, cortical neurons must migrate over long distances to reach the site of their final differentiation. The encoded protein appears to direct neuronal migration by regulating the organization and stability of microtubules. In addition, the encoded 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 this gene cause abnormal migration of neurons during development and disrupt the layering of the cortex, leading to epilepsy, mental retardation, subcortical band heterotopia ('double cortex' syndrome) in females and lissencephaly ('smooth brain' syndrome) in males. Multiple transcript variants encoding different isoforms have been found for this gene.