

Product datasheet for **CF501778**

Doublecortin (DCX) Mouse Monoclonal Antibody [Clone ID: OTI4A3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4A3
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human DCX (NP_835365) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	40.4 kDa
Gene Name:	doublecortin
Database Link:	NP_835365 Entrez Gene 13193 Mouse Entrez Gene 84394 Rat Entrez Gene 1641 Human O43602



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Background:

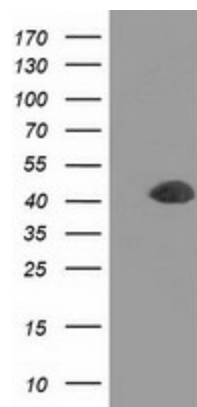
This gene encodes a member of the doublecortin family. The protein encoded by this gene is a cytoplasmic protein and contains two doublecortin domains, which bind microtubules. In the developing cortex, cortical neurons must migrate over long distances to reach the site of their final differentiation. 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. [provided by RefSeq]

Synonyms:

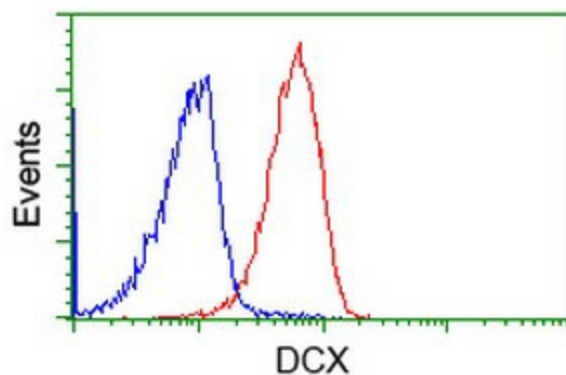
DBCN; DC; LISX; SCLH; XLIS

Protein Families:

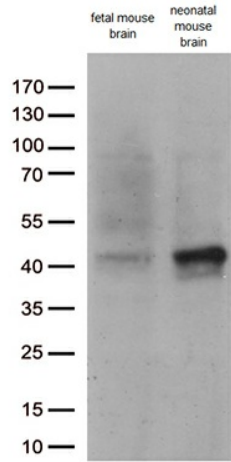
Druggable Genome

Product images:


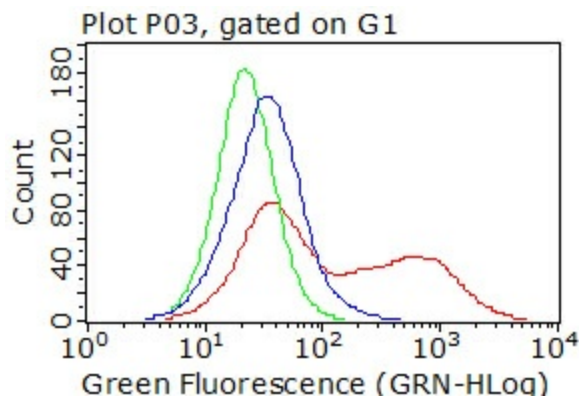
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DCX (Cat# [RC221891], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DCX (Cat# [TA501778]). Positive lysates [LY403598] (100ug) and [LC403598] (20ug) can be purchased separately from OriGene.



Flow cytometric Analysis of Jurkat cells, using anti-DCX antibody ([TA501778]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Western blot analysis of extracts (35ug) from 2 tissues by using anti-DCX monoclonal antibody (1:250).



Living HEK293T cells transfected with either [RC221891] plasmid (red) or empty vector (blue) were immunostained by anti-DCX antibody ([TA501778]) or isotype control antibody (green), and then analyzed by flow cytometry (1:100).