

DCX Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant DCX. Catalog # AT1727a

Specification

DCX Antibody (monoclonal) (M01) - Product Information

Application WB, IF **Primary Accession** 043602 Other Accession BC027925 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 kappa Calculated MW 40574

DCX Antibody (monoclonal) (M01) - Additional Information

Gene ID 1641

Other Names

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

Target/Specificity

DCX (AAH27925, 1 a.a. \sim 360 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000 IF~~1:50~200

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

DCX Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

DCX Antibody (monoclonal) (M01) - Protocols

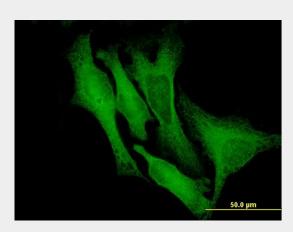
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot



- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

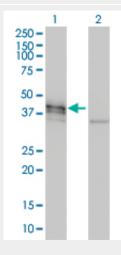
DCX Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to DCX on HeLa cell . [antibody concentration 10 $\mbox{ug/ml}$]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (65.34 KDa) .





Western Blot analysis of DCX expression in transfected 293T cell line by DCX monoclonal antibody (M01), clone 1G12.

Lane 1: DCX transfected lysate(41.4 KDa).

Lane 2: Non-transfected lysate.

DCX Antibody (monoclonal) (M01) - 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.

DCX Antibody (monoclonal) (M01) - References

1.LC-MS/MS identification of doublecortin as abundant beta cell-selective protein discharged by damaged beta cells in vitro. Jiang L, Brackeva B, Stangel G, Verhaeghen K, Costa O, Couillard-Despres S, Rotheneichner P, Aigner L, Van Schravendijk C, Pipeleers D, Ling Z, Gorus F, Martens GA.J Proteomics. 2013 Jan 19. doi:pii: S1874-3919(13)00022-5. 10.1016/j.jprot.2012.12.031.