

Product Data Sheet: Doublecortin Mouse Monoclonal Antibody

Cat. No: MAB-94065
Conjugate: Unconjugated

Size: 100 ug

Clone: 7D1

Concentration: 1mg/ml

Host: Mouse

Isotype: IgG2a

Immunogen:Recombinant full length human Lis-A isoform of doublecortin expressed in and

purified from E. coli.

Reactivity: Human, Mouse, Rat

Applications: Western Blot: 1:1,000 Immunofluorescence: 1:1,000 Immunocytochemistry:

1:1,000 Immunohistochemistry: 1:1,000

Molecular Weight: 35-45kDa **Purification:** Purified

Doublecortin was originally discovered since defects in the gene encoding it are causative of an X-linked lissencephaly, a rare group of brain malformations resulting in a smooth cerebral cortex caused by aberrant neuronal migration during development. The name doublecortin comes from the unusual layering of the cortex in this form of lissencephaly, which appears to have a second deep cortical layer of neurons. The doublecortin protein appears to function as a microtubule and actin binding protein expressed in developing neuroblasts as they become post-mitotic, but is lost as neurons mature. Loss of doublecortin causes defects in neuronal migration during development, so that many neurons

causes defects in neuronal migration during development, so that many neurons fail to migrate into the cortex but remain close to the ventricular germinal zones.

Antibodies to doublecortin are useful to identify neuronal stem cells and developing neurons in sections and in tissue culture, and to monitor

neurogenesis. Studies of neuroblastoma, the most common form of extracranial solid tumor in childhood, show that levels of doublecortin mRNA are associated with poor patient outcome . The Doublecortin antibody was made against full length recombinant human doublecortin expressed in and purified from E. coli.

Form: Liquid

Buffer: Purified antibody at 1mg/mL in 50% PBS, 50% glycerol plus 5mM NaN3

Storage: Store at 4°C for short term, for longer term at -20°C

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