

Product datasheet for RC216349

Doublecortin (DCX) (NM_178151) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Doublecortin (DCX) (NM_178151) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Doublecortin
Synonyms:	DBCN; DC; LISX; SCLH; XLIS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216349 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAACCTGATTTTGGACACTTTGACGAAAGAGATAAGACATCCAGGAACATGCGAGGCTCCCGGATGA
ATGGGTTGCCTAGCCCCACTCACAGCGCCACTGTAGCTTCTACCGAACCCAGAACCTTGCAGGCACTGAG
TAATGAGAAGAAAGCCAAGAAGGTACGTTTCTACCGCAATGGGGACCGCTACTTCAAGGGGATTGTGTAC
GCTGTGCTCTGACCGTTTTTCGACGCTTTGACGCCTTGCTGGCTGACCTGACCGGATCTCTGTCTGACA
ACATCAACCTGCCTCAGGGAGTGCCTTACATTTACACCATTGATGGATCCAGGAAGATCGGAAGCATGGA
TGAAGTGGAGGAAGGGAAAGCTATGTCTGTTCCCTCAGACAACCTCTTTAAAAAGGTGGAGTACACCAAG
AATGTCAATCCCAACTGGTCTGTCAACGTAACATCTGCCAATATGAAAGCCCCCAGTCCCTTGCTA
GCAGCAACAGTGCACAGGCCAGGGAGAACAAGGACTTTGTGCGCCCCAAGCTGGTTACCATCATCCGCAG
TGGGGTGAAGCCTCGGAAGGCTGTGCGTGTGCTTCTGAACAAGAAGACAGCCACTCTTTTGAGCAAGTC
CTCACTGATATCAGAAAGCCATCAAACTGGAGACCGGGTGTCAAAAACTCTACACTCTGGATGGAA
AACAGGTAACCTGTCTCCATGATTTCTTTGGTGATGATGATGTGTTTATTGCCTGTGGTCTGAAAAATT
TCGCTATGCTCAGGATGATTTTTCTCTGGATGAAAATGAATGCCGAGTCATGAAGGGAAACCCATCAGCC
ACAGCTGGCCAAAGGCATCCCCAACCTCAGAAGACTTCAGCCAAGAGCCCTGGTCTATGCGCCGAA
GCAAGTCTCCAGCTGACTCAGCAAACGGAACCTCCAGCAGCCAGCTCTCTACCCCAAGTCTAAGCAGTC
TCCCATCTCTACGCCACCAGTCTGGCAGCCTCCGGAAGCACAAGGACCTGTACCTGCCTCTGTCTTG
GATGACTCGGACTCGCTTGGTGATTCCATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_178151.2](#), [NP_835364.1](#)

RefSeq Size: 9262 bp

RefSeq ORF: 1083 bp

Locus ID: 1641

UniProt ID: [O43602](#)

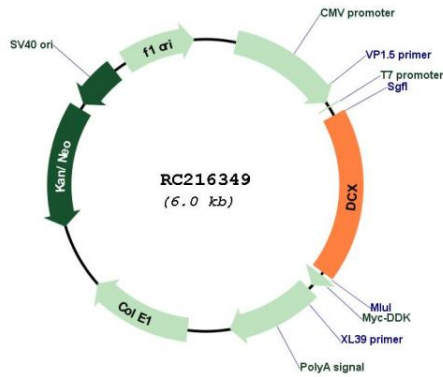
Cytogenetics: Xq23

Protein Families: Druggable Genome

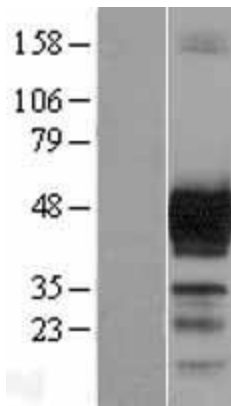
MW: 40 kDa

Gene Summary: 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, cognitive disability, 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, Sep 2010]

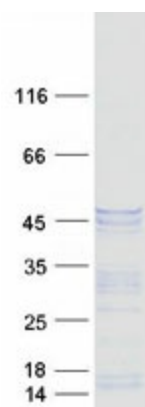
Product images:



Circular map for RC216349



Western blot validation of overexpression lysate (Cat# [LY405947]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216349 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DCX protein (Cat# [TP316349]). The protein was produced from HEK293T cells transfected with DCX cDNA clone (Cat# RC216349) using MegaTran 2.0 (Cat# [TT210002]).