

Product datasheet for **SC109146**

Doublecortin (DCX) (NM_178152) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Doublecortin (DCX) (NM_178152) Human Untagged Clone
Tag:	Tag Free
Symbol:	Doublecortin
Synonyms:	DBCN; DC; LISX; SCLH; XLIS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_178152, the custom clone sequence may differ by one or more nucleotides

```
ATGGAATTGATTTGGACACTTTGACGAAAGAGATAAGACATCCAGGAACATGCGAGGCTCCCGGATGA
ATGGGTTGCCTAGCCCCACTCACAGCGCCCACTGTAGCTTCTACCGAACAGAACCTTGACGGCACTGAG
TAATGAGAAGAAAGCCAAGAAGGTACGTTTCTACCGCAATGGGGACCGCTACTTCAAGGGGATTGTGTAC
GCTGTGCTCTGACCGTTTTGCGAGCTTTGACGCCTTGCTGGCTGACCTGACGCGATCTGTCTGACA
ACATCAACCTGCCTCAGGGAGTGCATTACATTTACACCATTGATGGATCCAGGAAGATCGGAAGCATGGA
TGAAGTGGAGGAAGGGAAAGCTATGTCTGTTCCCTCAGACAACCTCTTTAAAAAGGTGGAGTACACCAAG
AATGTCAATCCCAACTGGTCTGTCAACGTAACCAATCTGCCAATATGAAAGCCCCCAGTCCTTGCTA
GCAGCAACAGTGCACAGGCCAGGAGAACAAGGACTTTGTGCGCCCAAGCTGGTTACCATCATCCGCAG
TGGGGTGAAGCCTCGGAAGGCTGTGCGTGTGCTTCTGAACAAGAAGACAGCCCACTCTTTTGAGCAAGTC
CTCACTGATATCAGAAAGCCATCAAACTGGAGACCGGGTGTCAAAAACTCTACACTCTGGATGGAA
AACAGGTAAGTGTCTCCATGATTTCTTTGGTGTATGATGATGTTTATTGCCTGTGGTCTGAAAAATT
TCGCTATGCTCAGGATGATTTTCTCTGGATGAAAATGAATGCCGAGTCATGAAGGGAAACCCATCAGCC
ACAGCTGGCCAAAGGCATCCCCAACACCTCAGAAGACTTCAGCCAAGAGCCCTGGTCTATGCGCCGAA
GCAAGTCTCCAGCTGACTCAGGTAACGACCAAGACGCAACGGAACCTCCAGCAGCCAGCTCTACCCC
CAAGTCTAAGCAGTCTCCATCTCTACGCCACCAGTCTGGCAGCCTCCGGAAGCACAAGGACCTGTAC
TCGCCTGTCTGCTGGATGACTCGGACTCGCTTGGTATTCCATGTAA
```



[View online »](#)

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_178152 unedited</p> <pre>TTATAGGCGGCCGCGACATTCGCACGAGGGTTTTCTTTCTCTCAGCATCTCCACCCAACC AGCAGAAAACCGGTCTCTGAGGTTCCACCAAAATATGGAAGTTGATTTTGGACACTTTGA CGAAAGAGATAAGACATCCAGGAACATGCGAGGCTCCCGGATGAATGGGTTGCCTAGCCC CACTCACAGCGCCCACTGTAGCTTCTACCGAACAGAACCTTGCAGGCACTGAGTAATGA GAAGAAAGCCAAGAAGGTACGTTTTCTACCGCAATGGGGACCGCTACTTCAAGGGGATTGT GTACGCTGTGTCTCTGACCGTTTTTCGCAGCTTTGACGCCTTGCTGGCTGACCTGACGCG ATCTCTGTCTGACAACATCAACCTGCCTCAGGGAGTGCGTTACATTTACACCATTGATGG ATCCAGGAAGATCGGAAGCATGGATGAACTGGAGGAAGGGGAAAGCTATGTCTGTTCCTC AGACAACCTTTAAAAAGGTGGAGTACACCAAGAATGTCATCCCAACTGGTCTGNAACGT AAAACATCTGCCAATATGAAAGCCCCCAGTCCTTGGCTAGCAGCAACAGTGCACAGGCC AGGGAGACAANGGACTTNTGTGCGCCCCAAGCTGGGTTACCATCATNCCGAGTGGGGGG TGAAGCCTCNGAANGGCTGTNNGCNGTGTGCCTTCTGAACAAAGAAGACAGCCNACTCT TTTNGAGCCAAGTNNCTCACTTGATATCACAAGAAAGCCATCACTGGAGACCGGCGGGG GGTGGCAAAAAAACCCTACCTCTGGATGAAAAACAGGNAACTGGGCTCATGATTCCTCC TTTGGGAGGAAAAAAGGGAATATTCCTCCGGGGGGCGAAAAAATTCCCTATGCCAGA AGAAAAATTTTTCTTGGTAAAAGAATAGCCCGGTCTGAAAGGGAACCATCCA</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' genomic read for NM_178152 unedited</p> <pre>NAAAACTTTGNAAACCGCGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTGGTA AATTTTCTTCATGTGTTTTTTAGACAAAAGAAAAATCACCAGTTTATAAAAAAGGAGCCT GAAGAGTTTGCTCCTGAAATACAGACATGAATTTTTATAAAAAAGGATATTGATTTCTTGC TATAAAAAAGAGACTGAAAGGTGTCAGACCTGAAAACAAATCTCACAGTGTTTTCAGTGT TGCTGTTAACAAGGCATTCAATAGAACAGAGATAGATGGATACCATACAGTTTCATGTAA TCATGTGGTATGTTAGACAGCCTTCTAGAGGAATCAGGTATATGAAGTCCCTTACTCCAA ACTATTATCAATTGCTTATTGATTCCAAATTGCCTCAGTGGAGAGATTGACCAGGAATTC ACTGTGCTTTATAAACTCTTCGGAAATGTCTGCAGTATTTTCCAATTCTGTCTATTCTCT TAGCTAACCCAGCACCAGGATCCTAAGCATCTGGTGTGACAATTATAAGTTGTTGGTTTA TTTCTCCCATTTGACAGCCAGAATTGGTGTGGACAACAACCCGGGCCTCAATCANGAG TGAAGAGTGAGGCTGGNGAGCTGCCTTGTCTTCCAGGGTCTCCACCATTCTTGAG ATCCAGAGAAAAGGGCACTTTGTGTTTGTATTCTTGGATCTGCCAATGAGTTNTTTTTTT TTCCACACAAAACATTTTAAGTGTGTATATGTAACAGCCCTCTACAAAAGAAGACTGT ATGGGCAAAATAGACAGGCAATATTACGCCAGGCCCTAAACCTTCCCATGGAAGTGCAT GGACTAACACCATTTGCATCCCCGGAAGCCTGCCCAAAGGAAGGTTACAATCAATCCCCA AAATGGGAAACGG</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_178152
Insert Size:	2300 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_178152.1 , NP_835365.1
RefSeq Size:	9069 bp
RefSeq ORF:	1098 bp
Locus ID:	1641
UniProt ID:	O43602
Cytogenetics:	Xq23
Protein Families:	Druggable Genome
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) has an alternate 5' exon, resulting in a downstream AUG start codon, and has an additional segment in the 3' coding region, as compared to variant 1. The resulting isoform (b) has a shorter N-terminus and an extra internal segment compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>