

## Product datasheet for **RC216349L2V**

### Doublecortin (DCX) (NM\_178151) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Doublecortin (DCX) (NM_178151) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Doublecortin
Synonyms:	DBCN; DC; LISX; SCLH; XLIS
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_178151
ORF Size:	1080 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC216349).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_178151.1</a> , <a href="#">NP_835364.1</a>
RefSeq Size:	9262 bp
RefSeq ORF:	1083 bp
Locus ID:	1641
UniProt ID:	<a href="#">O43602</a>
Cytogenetics:	Xq23
Protein Families:	Druggable Genome
MW:	40 kDa



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**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]