

## Product datasheet for **RR209497L3V**

### **Dclk2 (NM\_001009691) Rat Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Dclk2 (NM_001009691) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Dclk2
Synonyms:	CL2; CLICK-II; CLICK2; Dck2; RGD1308384
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_001009691
ORF Size:	2301 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR209497).
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_001009691.3</a> , <a href="#">NP_001009691.3</a>
RefSeq Size:	3969 bp
RefSeq ORF:	2304 bp
Locus ID:	310698
UniProt ID:	<a href="#">Q5MPA9</a>
Cytogenetics:	2q34



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**Gene Summary:**

This gene encodes a member of the protein kinase superfamily and the doublecortin family. The protein encoded by this gene contains two N-terminal doublecortin domains, which bind microtubules and regulate microtubule polymerization, a C-terminal serine/threonine protein kinase domain, which shows substantial homology to Ca<sup>2+</sup>/calmoduline-dependent protein kinase, and a serine/proline-rich domain in between the doublecortin and the protein kinase domains, which mediates multiple protein-protein interactions. The microtubule-polymerizing activity of the encoded protein is independent of its protein kinase activity. Mouse studies show that this gene and the DCX gene, another family member, share function in the establishment of hippocampal organization and that their absence results in a severe epileptic phenotype and lethality, as described in human patients with lissencephaly. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Sep 2010]