

Product datasheet for **TR313540**

Doublecortin (DCX) Human shRNA Plasmid Kit (Locus ID 1641)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Doublecortin (DCX) Human shRNA Plasmid Kit (Locus ID 1641)
Locus ID:	1641
Synonyms:	DBCN; DC; LISX; SCLH; XLIS
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	DCX - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1641). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_000555 , NM_001195553 , NM_178151 , NM_178152 , NM_178153 , NM_178153.1 , NM_178153.2 , NM_000555.1 , NM_000555.2 , NM_000555.3 , NM_178151.1 , NM_178151.2 , NM_178152.1 , NM_178152.2 , NM_001195553.1 , BC027925 , BC027925.1 , NM_001369374 , NM_001369370 , NM_001369371 , NM_001369372 , NM_001369373 , NM_178152.3 , NM_001195553.2 , NM_178153.3
UniProt ID:	O43602
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]



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- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).