

Product datasheet for TL313555

OriGene Technologies, Inc.

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DCAMKL2 (DCLK2) Human shRNA Plasmid Kit (Locus ID 166614)

Product data:

Product Type: shRNA Plasmids

Product Name: DCAMKL2 (DCLK2) Human shRNA Plasmid Kit (Locus ID 166614)

Locus ID: 166614

Synonyms: CL2; CLICK-II; CLICK2; CLIK2; DCAMKL2; DCDC3; DCDC3B; DCK2

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: DCLK2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 166614).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001040260, NM 001040261, NM 152619, NR 036614, NM 001040260.1,

NM 001040260.2, NM 001040260.3, NM 001040261.1, NM 001040261.2, NM 001040261.3,

NM 001040261.4, NM 152619.1, BC019831, BC032726, BC172430, NM 001040261.5

UniProt ID: Q8N568

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 Ca2+/calmodulin-dependent protein kinase, and a serine/proline-rich domain in between the doublecortin and the protein kinase

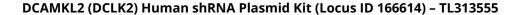
domains, which mediates multiple protein-protein interactions. The microtubule-

polymerizing activity of the encoded protein is independent of its protein kinase activity. Mouse studies show that the DCX gene, another family member, and this gene 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. Multiple alternatively spliced transcript variants have been identified. [provided by RefSeq, Sep 2010]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







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).