

## **Product datasheet for TL302914**

#### OriGene Technologies, Inc.

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### NT2NL (NOTCH2NL) Human shRNA Plasmid Kit (Locus ID 388677)

#### **Product data:**

**Product Type:** shRNA Plasmids

Product Name: NT2NL (NOTCH2NL) Human shRNA Plasmid Kit (Locus ID 388677)

**Locus ID:** 388677

Synonyms: N2N; NOTCH2NL

Vector: pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: NOTCH2NL - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

388677). 5µg purified plasmid DNA per construct

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

RefSeq: NM 203458, NM 203458.1, NM 203458.2, NM 203458.3, NM 203458.4, BC065219,

BC065219.1, BC010154, BC019835, BC084572, BC090943, BM792637, NM 001364006

UniProt ID: Q7Z3S9

Summary: Human-specific protein that promotes neural progenitor proliferation and evolutionary

expansion of the brain neocortex by regulating the Notch signaling pathway

(PubMed:29856954, PubMed:29856955, PubMed:29561261). Able to promote neural

progenitor self-renewal, possibly by down-regulating neuronal differentiation genes, thereby delaying the differentiation of neuronal progenitors and leading to an overall final increase in neuronal production (PubMed:29856954). Acts by enhancing the Notch signaling pathway via

two different mechanisms that probably work in parallel to reach the same effect

(PubMed:29856954). Enhances Notch signaling pathway in a non-cell-autonomous manner via direct interaction with NOTCH2 (PubMed:29856954). Also promotes Notch signaling pathway in a cell-autonomous manner through inhibition of cis DLL1-NOTCH2 interactions, which promotes neuronal differentiation (By similarity).[UniProtKB/Swiss-Prot Function]

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).