

Product datasheet for **RG209415**

NT2NL (NOTCH2NL) (NM_203458) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NT2NL (NOTCH2NL) (NM_203458) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NT2NL
Synonyms:	N2N; NOTCH2NL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209415 representing NM_203458 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGTGTTACCTACCACAATGGCACAGGATACTGCAATGTCCAGAAGGCTTCTTGGGGGAATATTGTC
AACATCGAGACCCCTGTGAGAAGAACCGCTGCCAGAATGGTGGGACTTGTGTGGCCAGGCCATGCTGGG
GAAAGCCACGTGCCGATGTGCCTCAGGGTTTACAGGAGAGGACTGCCAGTACTCGACATCTCATCCATGC
TTTGTGTCTCGACCTTGCTGAATGGCGGCACATGCCATATGCTCAGCCGGGATACCTATGAGTGCACCT
GTCAGGTCGGGTTTACAGGTAAGGAGTGCCAATGGACCGATGCCTGCCTGTCTCATCCCTGTGCAATGG
AAGTACCTGTACCACTGTGGCCAACCAAGTTCTCCTGCAATGCCTCACAGGCTTCACAGGGCAGAAGTGT
GAGACTGATGTCAATGAGTGTGACATTCAGGACACTGCCAGCATGGTGGCATCTGCCTCAACCTGCCTG
GTTCTACCAAGTGCCAGTGCCTTCAGGGCTTCACAGGCCAGTACTGTGACAGCCTGTATGTGCCCTGTGC
ACCCTCGCCTTGTGTCAATGGAGGCACCTGTGGCAGACTGGTGACTTCACTTTTGAGTGCAACTGCCTT
CCAGAAACAGTGAGAAGAGGAACAGAGCTCTGGGAAAGAGACAGGGAAGTCTGGAATGAAAAGAACACG
ATGAGAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >RG209415 representing NM_203458
 Red=Cloning site Green=Tags(s)

MCVYHNGTGYCKPEGFLGEYCQHRDPCEKNRCQNGGTCVAQAMLGKATCRCASGFTGEDCQYSTSHPC
 FVSRPCLNGGTCHMLSRDTYECTCQVGTGKECQWTDACLSHPCANGSTCTTVANQFSCKCLTGFTGQKC
 ETDVNECDIPGHCQHGGICLNLPGSYQCQCLQGFTGQYCDLSLYPCAPSPCVNGGTCRQTGDTFECNCL
 PETVRRGTELWERDREVWNGKEHDEN

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_203458

ORF Size: 708 bp

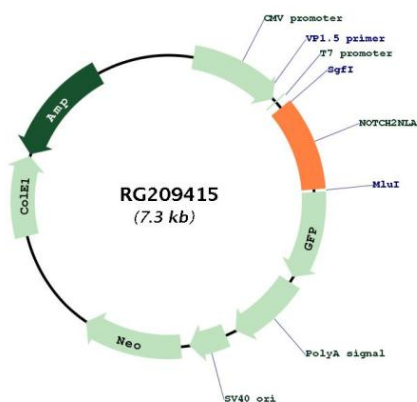
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_203458.1</u>
RefSeq Size:	4962 bp
RefSeq ORF:	711 bp
Locus ID:	388677
UniProt ID:	<u>Q7Z3S9</u>
Cytogenetics:	1q21.1
Gene 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]

Product images:



Circular map for RG209415