

## Product datasheet for **RG221762**

### **NOTCH4 (NM\_004557) Human Tagged ORF Clone**

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | NOTCH4 (NM_004557) Human Tagged ORF Clone                                   |
| Tag:                      | TurboGFP  |
| Symbol:                   | NOTCH4  |
| Synonyms:                 | INT3  |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-AC-GFP (PS100010)   |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| ORF Nucleotide Sequence:  | >RG221762 representing NM_004557<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC

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GACCTACTTGCCACCTTCCACTGCCTCTGCCCGCCAGGCTTAGAAGGGCAGCTCTGTGAGGTGGAGACCA  
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

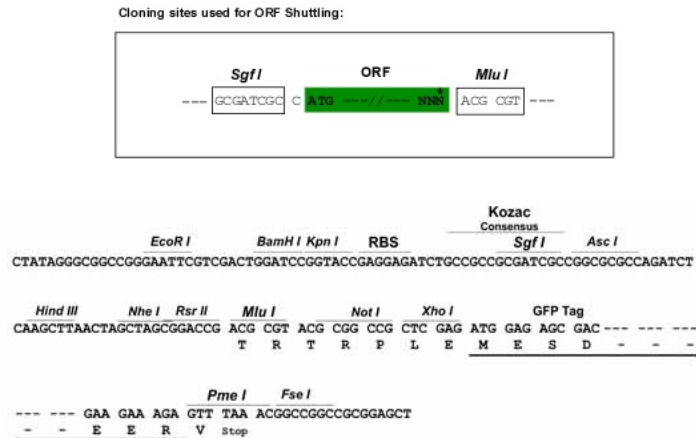
>RG221762 representing NM\_004557  
 Red=Cloning site Green=Tags(s)

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 SHCRSLSGVGAGGPTPRGRRFSAGMRGPRPNPAIMRGRYGAAGRGRVSTDDWPCDWVALGACGSASN  
 IPIPPPCLTSPERGPSQLDCGPPALQEMPINQGGEGKK

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfi-MluI

**Cloning Scheme:**


**ACCN:** NM\_004557

**ORF Size:** 5997 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.

**RefSeq:** [NM\\_004557.3](#), [NP\\_004548.3](#)

**RefSeq Size:** 6762 bp

**RefSeq ORF:** 6012 bp

**Locus ID:** 4855

UniProt ID: [Q99466](#)

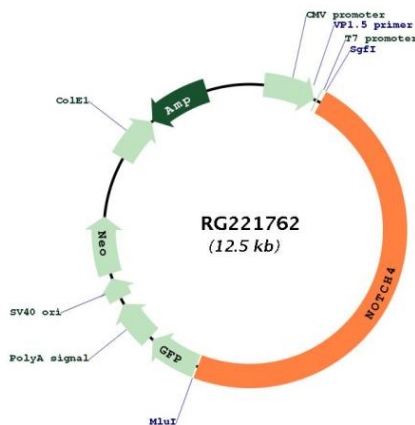
Cytogenetics: 6p21.32

Protein Families: Druggable Genome

Protein Pathways: Dorso-ventral axis formation, Notch signaling pathway

**Gene Summary:** This gene encodes a member of the NOTCH family of proteins. Members of this Type I transmembrane protein family share structural characteristics including an extracellular domain consisting of multiple epidermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple different domain types. Notch signaling is an evolutionarily conserved intercellular signaling pathway that regulates interactions between physically adjacent cells through binding of Notch family receptors to their cognate ligands. The encoded preproprotein is proteolytically processed in the trans-Golgi network to generate two polypeptide chains that heterodimerize to form the mature cell-surface receptor. This receptor may play a role in vascular, renal and hepatic development. Mutations in this gene may be associated with schizophrenia. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]

### Product images:



Circular map for RG221762