

## Product datasheet for **RN204371**

### Notch3 (NM\_020087) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Notch3 (NM_020087) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Notch3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN204371 representing NM_020087 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGCCGGGGCCCGGGCCCGCCCGCGTCTGCTGCCTGATGGCCCTGCCACCGCCACCACCGCCCA  
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AGGGAGATGCAGATGCCGATGGCATGGATGTCAACGTACGAGGGCCTGATGGCTTACCCCCTTATGCT
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TGCTCAACCACACCCCATATCTGTTCCCTCCCTCAGTCCCAGACTCAGCTGGGGCCCCAGCCAGAA
GTAAACCCCAAGAGGCAGGTGATGGCCTAA

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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-MluI

**ACCN:**

NM\_020087

**Insert Size:**

6960 bp

**OTI Disclaimer:**

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_020087.2](#), [NP\\_064472.2](#)

**RefSeq Size:** 7319 bp

**RefSeq ORF:** 6960 bp

**Locus ID:** 56761

**UniProt ID:** [Q9R172](#)

**Cytogenetics:** 7q11

**Gene Summary:** Functions as a receptor for membrane-bound ligands Jagged1, Jagged2 and Delta1 to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes of the enhancer of split locus. Affects the implementation of differentiation, proliferation and apoptotic programs (By similarity). Acts instructively to control the cell fate determination of CNS multipotent progenitor cells, resulting in astroglial induction and neuron/oligodendrocyte suppression.[UniProtKB/Swiss-Prot Function]