

## Product datasheet for **RG210712**

### **NAT8L (NM\_178557) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NAT8L (NM\_178557) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** NAT8L  
**Synonyms:** CML3; NACED; NAT8-LIKE  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG210712 representing NM\_178557  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGGACATCGAGCAGTACTACATGAAGCCGCCCGGCTCCTGCTTCTGGGTGGCCGTGCTGGATGGCA  
 ACGTGGTGGCATTGTGGCTGCACGGGCCACGAGGAGGACAACACGGTGGAGCTGCTGCGGATGTCTGT  
 GGACTCACGTTTCCGAGGCAAGGGCATCGCCAAGGCGCTGGGCCGGAAGGTGCTGGAGTTCGCCGTGGT  
 CACAACACTCCGCGGTGGTGTGGGCACGACGGCCGTCAAGGTGGCCGCCACAAGCTCTACGAGTCGC  
 TGGGCTTCAGACACATGGGCGCCAGTGACCACTACGTGCTGCCGGCATGACCCTCTCGCTGGCTGAGCG  
 CCTCTTCTCCAGTCCGCTACCACCGCTACCGCCTGCAGCTGCCGAGGAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG210712 representing NM\_178557  
 Red=Cloning site Green=Tags(s)

MADIEQYYMKPPGSCFWVAVLDGNVVGIVAARAHEEDNTVELLRMSVDSRFRGKGIKALGRKVLFAVV  
 HNYSAVVLGTTAVKVAHKLYESLGFHRMGASDHVYLPGMTLSLAERLFFQVRYHRYRLQREE

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_178557

**ORF Size:** 402 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\\_178557.2](#), [NP\\_848652.1](#)

**RefSeq Size:** 2342 bp

**RefSeq ORF:** 909 bp

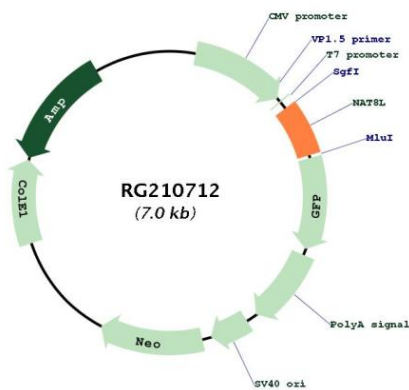
Locus ID: 339983

UniProt ID: [Q8N9F0](#)

Cytogenetics: 4p16.3

**Gene Summary:** This gene encodes a single-pass membrane protein, which contains a conserved sequence of the GCN5 or NAT superfamily of N-acetyltransferases and is a member of the N-acetyltransferase (NAT) superfamily. This protein is a neuron-specific protein and is the N-acetylaspartate (NAA) biosynthetic enzyme, catalyzing the NAA synthesis from L-aspartate and acetyl-CoA. NAA is a major storage and transport form of acetyl coenzyme A specific to the nervous system. The gene mutation results in primary NAA deficiency (hypoacetylaspartia). [provided by RefSeq, Dec 2010]

**Product images:**



Circular map for RG210712