

## Product datasheet for **RG224996**

### Neurogranin (NRGN) (NM\_001126181) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Neurogranin (NRGN) (NM\_001126181) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** NRGN  
**Synonyms:** hng; RC3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG224996 representing NM\_001126181  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACTGCTGCACCGAGAACGCCTGCTCCAAGCCGGACGACGACATTCTAGACATCCCGCTGGACGATC  
CCGGCGCCAACGCGGCCGCCCAAATCCAGGCGAGTTTTCGGGGCCACATGGCGCGGAAGAAGATAAA  
GAGCGGAGAGCGCGCCGGAAGGCCCGGGCCCTGGGGGCTGGCGGAGCTGGGTGGCCGGGGAGGC  
GCGGGCGCGGCCCCAGCGGAGAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG224996 representing NM\_001126181  
Red=Cloning site Green=Tags(s)  
MDCCTENACSKPDDDILDIPLDDPGANAAAQIQASFRGHMARKKIKSGERGRKGPGGPGGAGVARGG  
AGGGPSGD

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI

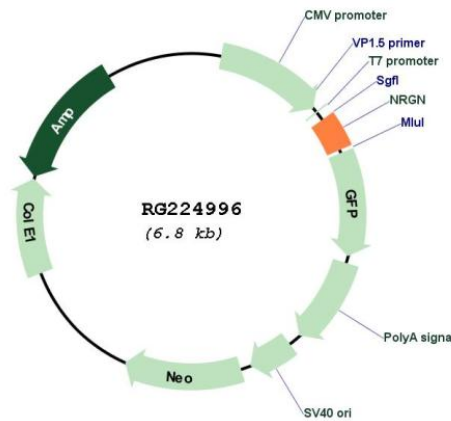


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_001126181

ORF Size: 234 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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001126181.2</a>
<b>RefSeq Size:</b>	1238 bp
<b>RefSeq ORF:</b>	237 bp
<b>Locus ID:</b>	4900
<b>UniProt ID:</b>	<a href="#">Q92686</a>
<b>Cytogenetics:</b>	11q24.2
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	Neurogranin (NRGN) is the human homolog of the neuron-specific rat RC3/neurogranin gene. This gene encodes a postsynaptic protein kinase substrate that binds calmodulin in the absence of calcium. The NRGN gene contains four exons and three introns. The exons 1 and 2 encode the protein and exons 3 and 4 contain untranslated sequences. It is suggested that the NRGN is a direct target for thyroid hormone in human brain, and that control of expression of this gene could underlay many of the consequences of hypothyroidism on mental states during development as well as in adult subjects. [provided by RefSeq, Jul 2008]