

## Product datasheet for **RG203415**

### Neugrin (NGRN) (NM\_016645) Human Tagged ORF Clone

#### Product data:

|                           |                                                                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                                                                     |
| Product Name:             | Neugrin (NGRN) (NM_016645) Human Tagged ORF Clone                                                                       |
| Tag:                      | TurboGFP                                                                                                                |
| Symbol:                   | Neugrin                                                                                                                 |
| Synonyms:                 | DSC92; mesenchymal stem cell protein DSC92; neugrin, neurite outgrowth associated; neurite outgrowth associated protein |
| Mammalian Cell Selection: | Neomycin                                                                                                                |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                                                                 |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                                                                  |
| ORF Nucleotide Sequence:  | >RG203415 representing NM_016645<br>Red=Cloning site Blue=ORF Green=Tags(s)                                             |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**

ATGGAGGCGCCTGGTGCCCCGCCAGGACCCTGACGTGGGAAGCCATGGAGCAGATACGGTATTTACATG  
 AGGAATTTCCAGAGTCTGGTCAGTTCCCAGGTTGGCTGAAGGCTTTGATGTCAGCACTGATGTATCCG  
 AAGAGTTTTAAAAGCAAGTTTTTACCCACATTGGAGCAGAAGCTGAAGCAGGATCAAAAAGTCCTTAAG  
 AAAGCTGGGCTTGCCCACTCGCTGCAGCACCTCCGGGGCTCTGGAATACCTCAAAGCTGCTCCCTGCAG  
 GCCACTCTGTATCAGGCTCTTTGCTTATGCCAGGGCATGAAGCCTCATCTAAAGACCCAAATCACAGCAC  
 AGCTTTGAAAGTGATAGAGTCAGACACTCACAGGACAAATACACCAAGGAGAAGGAAGGAAGAAATAAA  
 GAAATCCAGGACCTGGAGGAGAGCTTTGTGCTGTTGCTGCACCCCTAGGTCATCAAGAGAGCTGCAGA  
 AGTACTCCAGTGATTCTGAGAGCCCAGAGGAAGTGGCAGTGGTGCCTTGCCAAGTGGTCAGAAGCTGGA  
 GGAGTTGAAGGCAGAGGAGCCAGATAACTTCAGCAGCAAAGTAGTCAGAGGGGCCGAGAGTTCTTTGAC  
 AGCAACGGGAACCTTCCTGTACAGAATT

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA


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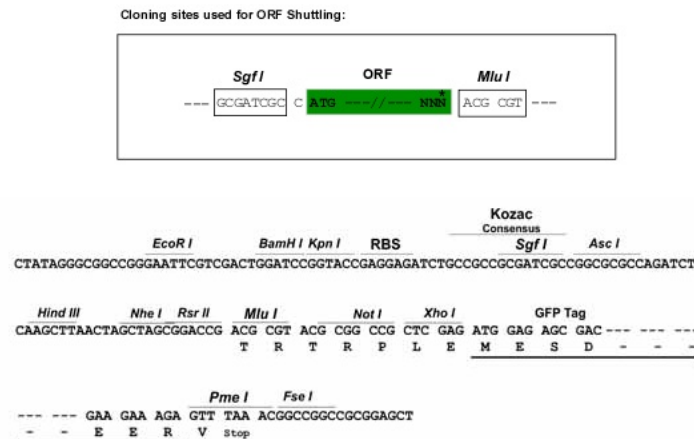
**Protein Sequence:** >RG203415 representing NM\_016645  
 Red=Cloning site Green=Tags(s)

MEAPGAPRRTLWEAMEQIRYLHEEFPEWSVPRLAEGFDVSTDVIRRVLKSFLPTLEQKLKQDQKVLK  
 KAGLAHSLQHLRGSGNTSKLLPAGHSVSGSLMPGHEASSKDPNHSTALKVIESDTHRTNTPRRRKGRNK  
 EIQDLEESFVPVAAPLGHPRELQKYSSDSESPRGTGSGALPSGQKLEELKAEEDNFSSKVVQRGREFFD  
 SNGNFLYRI

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_016645

**ORF Size:** 657 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\\_016645.2](#), [NP\\_057729.1](#)

**RefSeq Size:** 1782 bp

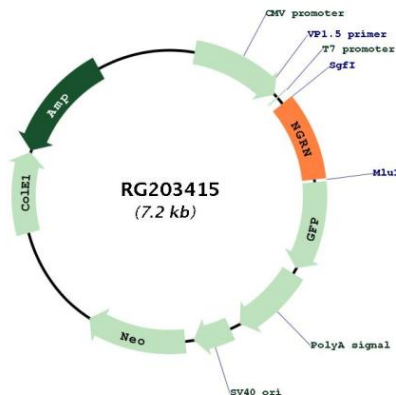
**RefSeq ORF:** 659 bp

**Locus ID:** 51335

**Cytogenetics:** 15q26.1

**Gene Summary:** Plays an essential role in mitochondrial ribosome biogenesis. As a component of a functional protein-RNA module, consisting of RCC1L, NGRN, RPUSD3, RPUSD4, TRUB2, FASTKD2 and 16S mitochondrial ribosomal RNA (16S mt-rRNA), controls 16S mt-rRNA abundance and is required for intra-mitochondrial translation of core subunits of the oxidative phosphorylation system.[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RG203415