

Product datasheet for **RG230498**

NRG2 (NM_001184935) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | NRG2 (NM_001184935) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | NRG2 |
| Synonyms: | DON1; HRG2; NTAK |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Protein Sequence: >RG230498 representing NM_001184935
 Red=Cloning site Green=Tags(s)

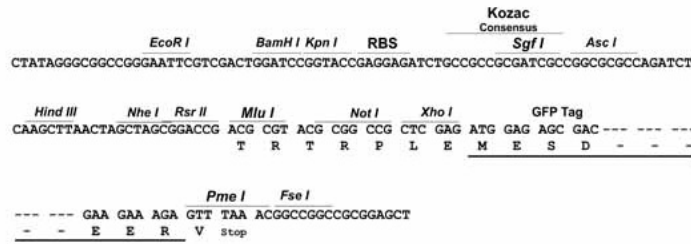
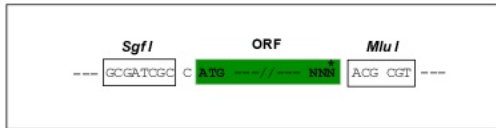
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PQPRSPAARRAAARSRAAAAGGMRRDPAPGFSMLLFGVSLACYSPLKSVQDQAYKAPVVVEGKVQGLVP
AGGSSSNSTREPPASGRVALVKVLDKWPLRSGGLQREQVISVGSVCPLERNQRYIFFLEPTEQPLVFKTA
FAPLDTNGKNLKKEVGKILCTDCATRPKLKKMKSQTGQVGEKQSLKCEAAAGNPQPSYRWFKDKGKELNRS
RDIRIKYGNRKNRSLQFNKVKVEDAGEYVCEAENILGKDTVGRGLYVNSEAEELYQKRVLTITGICVAL
LVVGIVCVVAYCKTKKQRKQMHNLRQNMCPAHQNRSLANGPSPHRLDPEEIQMADYISKNPATDHVIR
RETETTFSGSHSCSPSHHCSTATPTSSHRHESHTWLSERSESLTSDSQSGIMLSSVGTSKCNPAVEAR
ARRAAAYNLEERRRATAPPYHDSVDSL RDSPHSERYVSAL TTPARLSPVDFHYSLATQVPTFEITSPNSA
HAVSLPPAAPISYRLAEQQPLL RHPAPPGPGPGPGPGADMQRSYDSYYPAAAGPGRRTGALGGS
LGSLPASFPRIPEDEYETTQECAPPPPRPRARGASRRTSAGPRRWRRLNGLAAQRARAARDSLSLS
SGSGGGSASASDDDDADDADGALAAESTPFLGLRGAHDALRSDSPPLCPAADSRTYYSLDSHSTRASSRHS
RGPPPPRAKQDSAPL
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



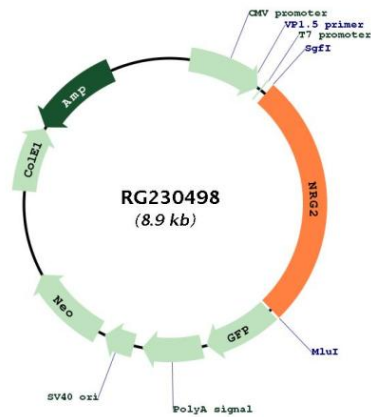
ACCN: NM_001184935

ORF Size: 2352 bp

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| OTI Disclaimer: | <p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p> |
| 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: | <ol style="list-style-type: none"> 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: | <u>NM_001184935.1</u> , <u>NP_001171864.1</u> |
| RefSeq Size: | 3741 bp |
| RefSeq ORF: | 2355 bp |
| Locus ID: | 9542 |
| UniProt ID: | <u>O14511</u> |
| Cytogenetics: | 5q31.2 |
| Protein Families: | Druggable Genome, Transmembrane |
| Protein Pathways: | ErbB signaling pathway |

Gene Summary:

This gene encodes a novel member of the neuregulin family of growth and differentiation factors. Through interaction with the ERBB family of receptors, this protein induces the growth and differentiation of epithelial, neuronal, glial, and other types of cells. The gene consists of 12 exons and the genomic structure is similar to that of neuregulin 1, another member of the neuregulin family of ligands. The products of these genes mediate distinct biological processes by acting at different sites in tissues and eliciting different biological responses in cells. This gene is located close to the region for demyelinating Charcot-Marie-Tooth disease locus, but is not responsible for this disease. Alternative transcript variants encoding distinct isoforms have been described. [provided by RefSeq, May 2010]

Product images:

Circular map for RG230498