

## Product datasheet for **RC221782**

### **NRG2 (NM\_004883) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NRG2 (NM_004883) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NRG2
Synonyms:	DON1; HRG2; NTAK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Protein Sequence: >RC221782 representing NM\_004883  
 Red=Cloning site Green=Tags(s)

MRQVCCSALPPPPEKGRCCSSYSDSSSSSSSERSSSSSSSESGSSSRSSNNSSISRPAAPPEPRPQQQ  
 PQPRSPAARRAAARSRAAAGGMRRDPAPGFSMLLFGVSLACYSPSLKSVQDQAYKAPVVVEGKVQGLVP  
 AGGSSSNSTREPPASGRVALVKVLDKWPLRSGGLQREQVIVSGSCVPLERNQRYIFFLEPTEQPLVFKTA  
 FAPLDTNGKNLKKEVGKILCTDCATRPKLKKMKSQTGQVGEKQSLKCEAAAGNPQPSYRWFKDGKELNRS  
 RDIRIKYGNRKNRSLQFNKVKVEDAGEYVCEAENILGKDTVGRGLYVNSVSTLLSSWSGHARKCNETAK  
 SYCVNGGVCYYIEGINQLSCKCPNGFFGQRCLEKLPLRLYMPDPKQKAEELYQKRVLTITGICVALLVVG  
 IVCVVAYCKTKKQRKQMHNLRQNMCPAHQNRSLANGPSPHRLDPEEIQMADYISKVNPATDHVIRRETE  
 TTFSGSHSCSPSHHCSTATPTSSRHESHWSLSESLTSDSQSGIMLSSVGTSKCNSPACVEARARRA  
 AAYNLEERRRATAPPYHDSVDSL RDSPHSERYVSAL TTPARLSPVDFHYSLATQVPTFEITSPNSAHAVS  
 LPPAAPISYRLAEQQPLLRHPAPPGPGPGPGPGADMQRYSYYPAGPGPRRGTCALGGSLGSL  
 PASPFRIPEDEYETTQECAPPPPPRARGASRRTSAGPRRWRRLNGLAAQARAARDLSLSSGSG  
 GGSASASDDDADDADGALAAESTPFLGLRGAHDALRSDSPPLCPAADSRTYYSLDSHSTRASSRHSRGPP  
 PRAKQDSAPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

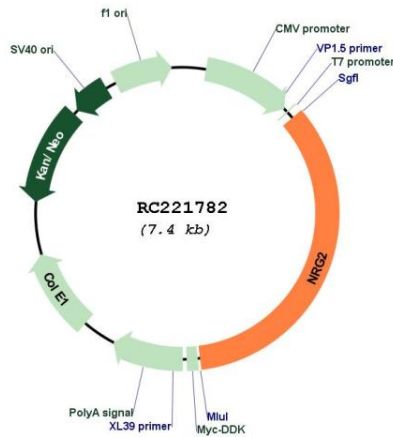


<b>ACCN:</b>	NM_004883
<b>ORF Size:</b>	2550 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<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_004883.3</a>
<b>RefSeq Size:</b>	3939 bp
<b>RefSeq ORF:</b>	2553 bp
<b>Locus ID:</b>	9542
<b>UniProt ID:</b>	<a href="#">O14511</a>
<b>Cytogenetics:</b>	5q31.2
<b>Domains:</b>	Neuregulin, ig, IGc2, IG, EGF
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	ErbB signaling pathway
<b>MW:</b>	91.7 kDa

**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 RC221782