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Product datasheet for RC224735

NRG3 (NM_001010848) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NRG3 (NM_001010848) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NRG3
Synonyms:	HRG3; pro-NRG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC224735 representing NM_001010848
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTGAAGGGGCGGCCGCTGCCTCGCCACCTGGTGCCGCTTCGGCAGCCGCCGCCTCGGCCGAGGAGG
GCACCGCGGCGGCTGCGGCGGCGGCAGCGGCGGGCGGGGGCCCGGACGGCGGCGGCGAAGGGGCGGCCGA
GCCCCCCCGGGAGTTACGCTGTAGCGACTGCATCGTGTGGAACCGGCAGCAGACGTGGCTGTGCGTGGTA
CCTCTGTTCATCGGCTTCATCGGCCTGGGGCTCAGCCTCATGCTTCTCAAATGGATCGTGGTGGGCTCCG
TCAAGGAGTACGTGCCCACCGACCTAGTGGACTCCAAGGGGATGGGCCAGGACCCCTTCTTCCTCTCCAA
GCCCAGCTCTTTCCCCAAGGCCATGGAGACCACCACCACTACCACTTCCACCACGTCCCCCGCCACCCCC
TCCGCCGGGGGTGCCGCCTCCTCCAGGACGCCCAACCGGATTAGCACTCGCCTGACCACCATCACGCGGG
CGCCCACTCGCTTCCCCGGGCACCGGGTGCCCATCCGGGCCAGCCCGCGCTCCACCACAGCACGGAACAC
TGCGGCCCCTGCGACGGTCCCGTCCACCACGGCCCCGTTCTTCAGTAGCAGCACGCTGGGCTCCCGACCC
CCGGTGCCAGGAACTCCAAGTACCCAGGCAATGCCCTCCTGGCCTACTGCGGCATACGCTACCTCCTCCT
ACCTTCACGATTCTACTCCCTCCTGGACCCTGTCTCCCTTTCAGGATGCTGCCTCCTCTTCTTCCTCTTC
TTCCTCCTCCGCTACCACCACCACACCAGAAACTAGCACCAGCCCCAAATTTCATACGACGACATATTCC
ACAGAGCGATCCGAGCACTTCAAACCCTGCCGAGACAAGGACCTTGCATACTGTCTCAATGATGGCGAGT
GCTTTGTGATCGAAACCCTGACCGGATCCCATAAACACTGTCGGTGCAAAGAAGGCTACCAAGGAGTCCG
TTGTGATCAATTTCTGCCGAAAACTGATTCCATCTTATCGGATCCAACAGACCACTTGGGGATTGAATTC
ATGGAGAGTGAAGAAGTTTATCAAAGGCAGGTGCTGTCAATTTCATGTATCATCTTTGGAATTGTCATCG
TGGGCATGTTCTGTGCAGCATTCTACTTCAAAAGCAAGAAACAAGCTAAACAAATCCAAGAGCAGCTGAA
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TTCAGAAGGACACCCCCGTCACCCCGAAGTAGGCTAGGTGGAATTGTGGGACCAGCATATCAGCAACTCG
AAGAATCAAGGATCCCAGACCAGGATACGATACCTTGCCAAGGGTATTCATCCAGTGGTTTAAAAACCCA
ACGAAATACATCAATAAATATGCAACTGCCTTCAAGAGAGACAAACCCCTATTTTAATAGCTTGGAGCAA
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TGACGTTGTCAATGTGAGTATTCCAGTCAGCGATTGTCTTATAGCAGAACAACAAGAAGTGAAAATATTG
CTAGAAACTGTCCAGGAGCAGATCCGAATTCTGACTGATGCCAGACGGTCAGAAGACTACGAACTGGCCA
GCGTAGAAACCGAGGACAGTGCAAGCGAAAACACAGCCTTTCTCCCCCTGAGTCCCACAGCCAAATCAGA
ACGAGAGGCGCAATTTGTCTTAAGAAATGAAATACAAAGAGACTCTGCATTGACCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

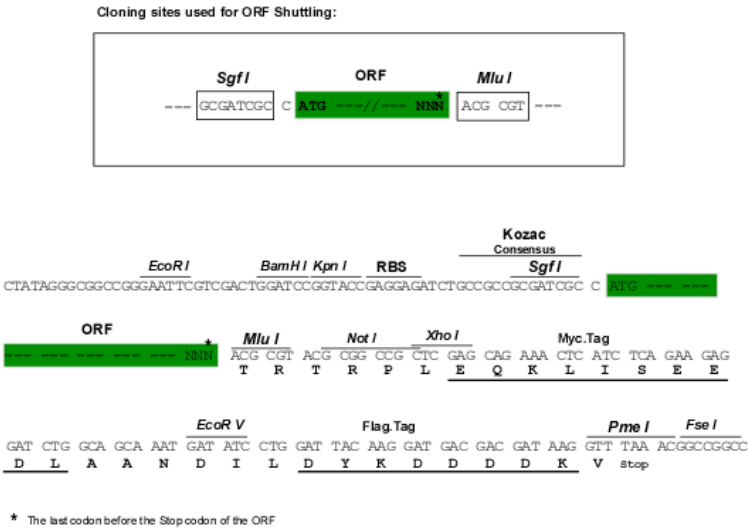
>RC224735 representing NM_001010848
Red=Cloning site Green=Tags(s)

MSEGAAAASPPGAASAAAASAEEGTAAAAAAAAAGGGPDGGGEGAAEPPRELRCSDCIVWNRQQTWLCVV
PLFIGFIGLGLSLMLLKWIVVGSVKEYVPTDLVDSKGMGQDPFFLSKPSSFPKAMETTTTTTSTTSPATP
SAGGAASSRTPNRISTRLTTITRAPTRFPGHRVPIRASPRSTTARNTAAPATVPSTTAPFFSSSTLGSRP
PVPGTPSTQAMPSWPTAAYATSSYLHDSTPSWTLSPFQDAASSSSSSSSSATTTTPETSTSPKFHTTTYS
TERSEHFKPCRDKDLAYCLNDGECFVIETLTGSHKHCRCKEGYQGVRCDQFLPKTDSILSDPTDHLGIEF
MESEEVYQRQVLSISCIIFGIVIVGMFCAAFYFKSKKQAKQIQEQLKVPQNGKSYSLKASSTMAKSENLV
KSHVQLQNYSKVERHPVTALEKMMESSFVGPQSFPEVPSPDRGSQSVKHHRSLSSCCSPGQRSGMLHRNA
FRRTPPSPRSRLGGIVGPAYQQLEESRIPDQDTIPCQGYSSSGLKTQRNTSINMQLPSRETNPYFNSLEQ
KDLVGYSSTRASSVPIIPSVGLEETCLQMPGISEVKSIKWCKNSYSADVVNVSIPVSDCLIAEQQEVKIL
LETVQEQIRILTDARRSEDYELASVETEDSASENTAFLPLSPTAKSEREAQFVLRNEIQRDSALTK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



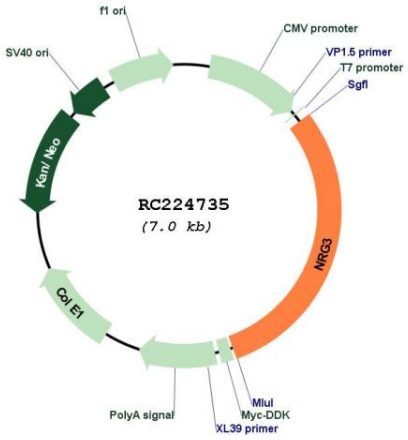
ACCN: NM_001010848

ORF Size: 2088 bp

OTI Disclaimer:	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. 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_001010848.4
RefSeq Size:	3692 bp
RefSeq ORF:	2091 bp
Locus ID:	10718
UniProt ID:	P56975
Cytogenetics:	10q23.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	ErbB signaling pathway
MW:	75 kDa

Gene Summary: This gene is a member of the neuregulin gene family. This gene family encodes ligands for the transmembrane tyrosine kinase receptors ERBB3 and ERBB4 - members of the epidermal growth factor receptor family. Ligand binding activates intracellular signaling cascades and the induction of cellular responses including proliferation, migration, differentiation, and survival or apoptosis. This gene encodes neuregulin 3 (NRG3). NRG3 has been shown to activate the tyrosine phosphorylation of its cognate receptor, ERBB4, and is thought to influence neuroblast proliferation, migration and differentiation by signalling through ERBB4. NRG3 also promotes mammary differentiation during embryogenesis. Linkage studies have implicated this gene as a susceptibility locus for schizophrenia and schizoaffective disorder. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described but their biological validity has not been verified.[provided by RefSeq, Sep 2009]

Product images:



Circular map for RC224735