

Product datasheet for SC124811

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NRG1 (NM_013964) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: NRG1 (NM_013964) Human Untagged Clone

Tag: Tag Free Symbol: NRG1

Synonyms: ARIA; GGF; GGF2; HGL; HRG; HRG1; HRGA; MST131; MSTP131; NDF; NRG1-IT2; SMDF

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)



Fully Sequenced ORF:

>NCBI ORF sequence for NM_013964, the custom clone sequence may differ by one or more nucleotides

CGGAGTCCGCGGCGGCAGCCAGAGCCCAGCCTTGCCTCCCGATTGAAAAGAGATGAAAAGCCAGGAATC GGCTGCAGGTTCCAAACTAGTCCTTCGGTGTGAAACCAGTTCTGAATACTCCTCTCAGATTCAAGTGG AGTCAGAACTTCGCATTAACAAAGCATCACTGGCTGATTCTGGAGAGTATATGTGCAAAGTGATCAGCAA ATTAGGAAATGACAGTGCCTCTGCCAATATCACCATCGTGGAATCAAACGAGATCATCACTGGTATGCCA GCCTCAACTGAAGGAGCATATGTGTCTTCAGAGTCTCCCATTAGAATATCAGTATCCACAGAAGGAGCAA ATACTTCTTCATCTACATCTACATCCACCACTGGGACAAGCCATCTTGTAAAATGTGCGGAGAAGGAGAA AACTTTCTGTGTGAATGGAGGGGAGTGCTTCATGGTGAAAGACCTTTCAAACCCCTCGAGATACTTGTGC AAGTGCCAACCTGGATTCACTGGAGCAAGATGTACTGAGAATGTGCCCATGAAAGTCCAAAACCAAGAAA AGGCGGAGGAGCTGTACCAGAAGAGAGTGCTGACCATAACCGGCATCTGCATCGCCCTCCTTGTGGTCGG CATCATGTGTGTGGTGGCCTACTGCAAAACCAAGAAACAGCGGAAAAAGCTGCATGACCGTCTTCGGCAG AGCAGAGACATCCTTTTCCACCAGTCACTATACTTCCACAGCCCATCACTCCACTACTGTCACCCAGACT CCTAGCCACAGCTGGAGCAACGGACACACTGAAAGCATCCTTTCCGAAAGCCACTCTGTAATCGTGATGT CATCCGTAGAAAACAGTAGGCACAGCAGCCCAACTGGGGGCCCAAGAGGACGTCTTAATGGCACAGGAGG CCCTCGTGAATGTAACAGCTTCCTCAGGCATGCCAGAGAAACCCCTGATTCCTACCGAGACTCTCCTCAT AGTGAAAGGTATGTCAGCCATGACCACCCCGGCTCGTATGTCACCTGTAGATTTCCACACGCCAAGCT CCCCCAAATCGCCCCCTTCGGAAATGTCTCCACCCGTGTCCAGCATGACGGTGTCCATGCCTTCCATGGC GGTCAGCCCCTTCATGGAAGAAGAGAGACCTCTACTTCTCGTGACACCACCAAGGCTGCGGGAGAAGAAG TTTGACCATCACCCTCAGCAGTTCAGCTCCTTCCACCACAACCCCGCGCATGACAGTAACAGCCTCCCTG TGTTAAGAAACTCGCCAATAGCCGGCGGGCCAAAAGAACCAAGCCCAATGGCCACATTGCTAACAGATTG GAAGTGGACAGCAACACAAGCTCCCAGAGCAGTAACTCAGAGAGTGAAACAGAAGATGAAAGAGTAGGTG AAGATACGCCTTTCCTGGGCATACAGAACCCCCTGGCAGCCAGTCTTGAGGCAACACCTGCCTTCCGCCT GGCTGACAGCAGGACTAACCCAGCAGGCCGCTTCTCGACACAGGAAGAAATCCAGGCCAGGCTGTCTAGT GTAATTGCTAACCAAGACCCTATTGCTGTATAA

Restriction Sites: Please inquire

ACCN: NM_013964

Insert Size: 5700 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. <u>More info</u>

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: <u>NM 013964.1, NP 039258.1</u>

 RefSeq Size:
 2224 bp

 RefSeq ORF:
 1923 bp

 Locus ID:
 3084

 UniProt ID:
 Q02297

 Cytogenetics:
 8p12

Protein Families: Druggable Genome, Secreted Protein, Transcription Factors, Transmembrane

Protein Pathways: ErbB signaling pathway



Gene Summary:

The protein encoded by this gene is a membrane glycoprotein that mediates cell-cell signaling and plays a critical role in the growth and development of multiple organ systems. An extraordinary variety of different isoforms are produced from this gene through alternative promoter usage and splicing. These isoforms are expressed in a tissue-specific manner and differ significantly in their structure, and are classified as types I, II, III, IV, V and VI. Dysregulation of this gene has been linked to diseases such as cancer, schizophrenia, and bipolar disorder (BPD). [provided by RefSeq, Apr 2016]

Transcript Variant: This variant (HRG-alpha), which uses the type I promoter, lacks two inframe exons but contains a different in-frame exon in the central coding region, compared to variant HRG-beta1. The resulting isoform (HRG-alpha, also known as erbB2 or gp30/alpha 1) contains an alternate internal segment and is shorter than isoform HRG-beta1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.