

## Product datasheet for **RC204878**

### Glucocorticoid Receptor (NR3C1) (NM\_001018074) Human Tagged ORF Clone

#### Product data:

|                           |                           |
|---------------------------|---------------------------|
| Product Type:             | Expression Plasmids       |
| Tag:                      | Myc-DDK                   |
| Symbol:                   | Glucocorticoid Receptor   |
| Synonyms:                 | GCCR; GCR; GCRST; GR; GRL |
| Mammalian Cell Selection: | Neomycin                  |
| Vector:                   | pCMV6-Entry (PS100001)    |
| E. coli Selection:        | Kanamycin (25 ug/mL)      |



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**ORF Nucleotide  
Sequence:**

>RC204878 representing NM\_001018074  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGACTCCAAGAATCATTAACTCCTGGTAGAGAAGAAAACCCAGCAGTGTGCTTGCTCAGGAGAGGG  
 GAGATGTGATGGACTTCTATAAAACCCTAAGAGGAGGAGCTACTGTGAAGGTTTCTGCGTCTTCACCTC  
 ACTGGCTGTCGCTTCTCAATCAGACTCCAAGCAGCGAAGACTTTTGTTGATTTTCCAAAAGGCTCAGTA  
 AGCAATGCGCAGCAGCCAGATCTGTCCAAGCAGTTTCACTCTCAATGGGACTGTATATGGGAGAGACAG  
 AAACAAAAGTGATGGGAAATGACCTGGGATTCCCACAGCAGGGCCAAATCAGCCTTCTCGGGGAAAC  
 AGACTTAAAGCTTTGGAAGAAAGCATTGCAAACCTCAATAGGTCGACCAGTGTTCAGAGAACCCCAAG  
 AGTTCAGCATCCACTGCTGTGTCTGCTGCCCCACAGAGAAGGAGTTTCCAAAACCTCACTCTGATGTAT  
 CTTCAGAACAGCAACATTTGAAGGGCCAGACTGGCACCAACGGTGGCAATGTGAAATTGTATACCACAGA  
 CCAAAGCACCTTTGACATTTTGAGGATTGGAGTTTCTTCTGGGTCCCAGGTAAAGAGACGAATGAG  
 AGTCCTTGAGATCAGACCTGTTGATAGATGAAAACCTGTTTGCTTCTCCTCTGGCGGGAGAAGACGATT  
 CATTCTTTTGAAGGAACTCGAATGAGGACTGCAAGCCTCTCATTTTACCGGACACTAAACCCAAAAT  
 TAAGGATAATGGAGATCTGGTTTTGTCAAGCCCAGTAATGTAACACTGCCCCAAGTGAAAACAGAAAAA  
 GAAGATTTTCATCGAATCTGCACCCCTGGGGTAATTAAGCAAGAGAACTGGGCACAGTTTACTGTCAGG  
 CAAGCTTCTCGGAGCAATATAATTGGTAATAAAATGTCTGCCATTTCTGTTTATGGTGTGAGTACCTC  
 TGGAGGACAGATGTACCACTATGACATGAATACAGCATCCCTTCTCAACAGCAGGATCAGAAGCCTATT  
 TTTAATGTCAATCCACCAATCCCGTTGGTCCGAAAATTGGAATAGGTGCCAAGGATCTGGAGATGACA  
 ACTTGACTTCTCTGGGGACTCTGAACCTCCCTGGTCAACAGTTTTTTCTAATGGCTATTCAAGCCCCAG  
 CATGAGACCAGATGTAAGCTCTCCTCCATCCAGCTCCTCAACAGCAACAACAGGACCACCTCCCAAACCTC  
 TGCTGTGTGCTCTGATGAAGCTTCAAGATGTCAATATGGAGTCTTAACCTGTGGAAGCTGTAAGTTT  
 TCTTCAAAGAGCAGTGAAGGACAGCACAATTACCTATGTGCTGGAAGGAATGATTGCATCATCGATAA  
 AATTCGAAGAAAAAACTGCCAGCATGCCGCTATCGAAAATGTCTTCAGGCTGGAATGAACCTGGAAGCT  
 CGAAAAACAAAGAAAAAAATAAAGGAATTCAGCAGGCCACTACAGGAGTCTCACAAGAAACCTCTGAAA  
 ATCCTGGTAACAAACAATAGTTCCTGCAACGTTACCACAACCTACCCCTACCCTGGTGTCACTGTTGGA  
 GGTATTGAACCTGAAGTGTTATATGCAGGATATGATAGCTCTGTTCCAGACTCAACTTGGAGGATCATG  
 ACTACGCTCAACATGTTAGGAGGGCGGCAAGTATTGCAGCAGTGAATGGGCAAAGGCAATACCAGGTT  
 TCAGGAACCTACACCTGGATGACCAATGACCCTACTGCAGTACTCCTGGATGTTTCTTATGGCATTTCG  
 TCTGGGTGGAGATCATATAGACAATCAAGTGCAAACCTGCTGTGTTTTGCTCCTGATCTGATTATTAAT  
 GAGCAGAGAATGACTCTACCCTGCATGTACGACCAATGTAACACATGCTGTATGTTTCTCTGAGTTAC  
 ACAGGCTTCAGGTATCTTATGAAGAGTATCTCTGTATGAAAACCTTACTGCTTCTCTCTTCAGTTCTTA  
 GGACGGTCTGAAGAGCCAAGAGCTATTTGATGAAATTAGAATGACCTACATCAAAGAGCTAGGAAAAGCC  
 ATTGTCAAGAGGGAAGGAACTCCAGCCAGAAGTGGCAGCGGTTTATCAACTGACAAAACCTCTTGATT  
 CTATGCATGAAGTGGTTGAAAATCTCCTTAACCTATTGCTTCCAAACATTTTGGATAAGACCATGAGTAT  
 TGAATTCCTCCGAGATGTTAGCTGAAATCATCACCAATCAGATACCAAAATATTCAATGGAAATATCAAA  
 AAACCTCTGTTTCATCAAAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC204878 representing NM\_001018074  
 Red=Cloning site Green=Tags(s)

MDSKESLTPGREENPSSVLAQERGDVMDFYKTLRGGATVKVSASSPSLAVASQSDSKQRRLLVDFPKGVS  
 SNAQQPDL SKAVSL SMGLYMGETETKVMGNDLGFPQQGQISLSSGETDLKLEEISANLNRSTSVPENPK  
 SSASTAVSAAPTEKEFPKTHSDVSSEQHLKGQTGTNGGNVKLYTTDQSTFDILQDLEFSSGSPGKETNE  
 SPWRSDLLIDENCLLSPLAGEDDSFLLLEGNSNEDCKPLILPDTKPKIKDNGDLVLSSPSNVTL PQVKTEK  
 EDFIELCTPGVIKQEKLGTVYQCASFPGANIIGNKMSAISVHGVSTSGGQMYHYDMNTASLSQQQDQKPI  
 FNVIPPPIPVGSEWNRCQSGDDNLTSLGTLNFPGRTVFSNGYSSPSMRPDVSSPPSSSSTATTGPPPKL  
 CLVCSDEASGCHYGVLTCGSCKVFFKRAVEGQHNYLCAGRNDICIIDKIRRKNCPACRYRKCLQAGMNLEA  
 RKTKKKIKIGIQATTGVSQETSENPKNKTIVPATLPQLTPTLVSLLEVIEPEVL YAGYDSSVPDSTWRIM  
 TTLNMLGGRQVIAAVKWAKAIPGFRNLHLDQMTLLQYSWMFLMAFALGWRSYRQSSANLLCFAPDLIIN  
 EQRMTPCMYDQCKHMLYVSELHRLQVSYEEYLCMKTL LLLSSVPKDGLKSQELFDEIRMTYIKELGKA  
 IVKREGNSSQNWRFYQLTKLLDSMHEVVENLLNYCFQTFLDKTM SIEFPEMLAEIITNQIPKYSNGNIK  
 KLLFHQK

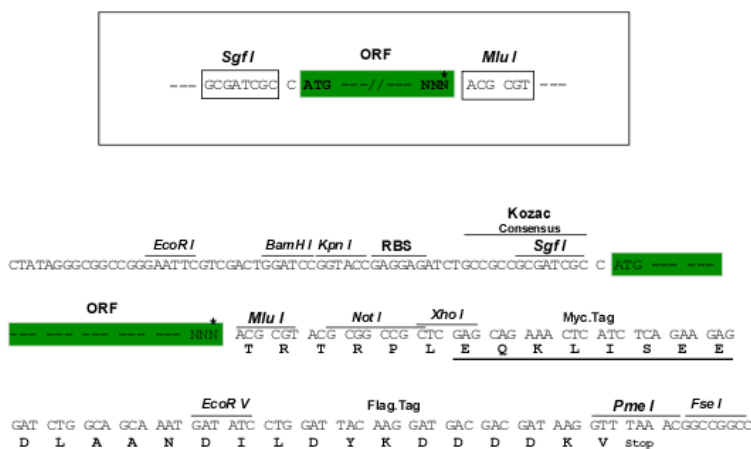
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3149\\_b01.zip](https://cdn.origene.com/chromatograms/mg3149_b01.zip)

**Restriction Sites:** Sgfi-MluI

### Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM\_001018074

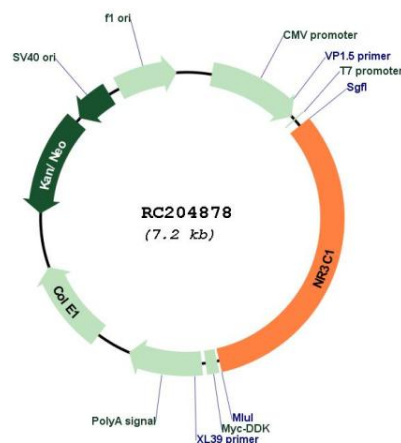
ORF Size: 2331 bp

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>RefSeq:</b>                | <a href="#">NM_001018074.1</a> , <a href="#">NP_001018084.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>RefSeq Size:</b>           | 6614 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>RefSeq ORF:</b>            | 2334 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Locus ID:</b>              | 2908                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>UniProt ID:</b>            | <a href="#">P04150</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Cytogenetics:</b>          | 5q31.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Protein Families:</b>      | Druggable Genome, Nuclear Hormone Receptor, Transcription Factors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Protein Pathways:</b>      | Neuroactive ligand-receptor interaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>MW:</b>                    | 85.5 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

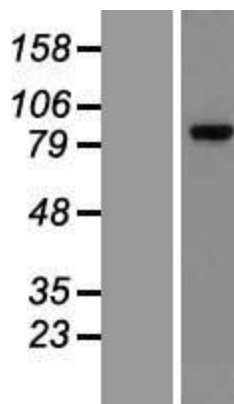
## Gene Summary:

This gene encodes glucocorticoid receptor, which can function both as a transcription factor that binds to glucocorticoid response elements in the promoters of glucocorticoid responsive genes to activate their transcription, and as a regulator of other transcription factors. This receptor is typically found in the cytoplasm, but upon ligand binding, is transported into the nucleus. It is involved in inflammatory responses, cellular proliferation, and differentiation in target tissues. Mutations in this gene are associated with generalized glucocorticoid resistance. Alternative splicing of this gene results in transcript variants encoding either the same or different isoforms. Additional isoforms resulting from the use of alternate in-frame translation initiation sites have also been described, and shown to be functional, displaying diverse cytoplasm-to-nucleus trafficking patterns and distinct transcriptional activities (PMID:15866175). [provided by RefSeq, Feb 2011]

## Product images:



Circular map for RC204878



Western blot validation of overexpression lysate (Cat# [LY422725]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204878 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).