

Product datasheet for **RC220377**

Glucocorticoid Receptor (NR3C1) (NM_001020825) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glucocorticoid Receptor (NR3C1) (NM_001020825) Human Tagged ORF Clone
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:

>RC220377 representing NM_001020825
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACTCCAAGAATCATTAACTCCTGGTAGAGAAGAAAACCCAGCAGTGTGCTTGCTCAGGAGAGGG
 GAGATGTGATGGACTTCTATAAAACCCTAAGAGGAGGAGCTACTGTGAAGTTTCTGCGTCTTCACCCTC
 ACTGGCTGTCGCTTCTCAATCAGACTCCAAGCAGCGAAGACTTTTGGTTGATTTTCCAAAAGGCTCAGTA
 AGCAATGCGCAGCAGCCAGATCTGTCCAAGCAGTTTCACTCTCAATGGGACTGTATATGGGAGAGACAG
 AAACAAAAGTGATGGAAATGACCTGGGATTCCCACAGCAGGGCCAAATCAGCCTTCTCGGGGAAAC
 AGACTTAAAGCTTTTGAAGAAAGCATTGCAAACCTCAATAGGTCGACCAGTGTCCAGAGAACCCCAAG
 AGTTCAGCATCCACTGCTGTGTCTGCTGCCCCACAGAGAAGGAGTTTCCAAAACCTCACTCTGATGAT
 CTTCAGAACAGCAACATTTGAAGGGCCAGACTGGCACCAACGGTGGCAATGTGAAATTGTATACCACAGA
 CCAAAGCACCTTTGACATTTTGCAAGATTGGAGTTTCTTCTGGGTCCCAGGTAAAGAGACGAATGAG
 AGTCCTTGAGATCAGACCTGTTGATAGATGAAAACCTGTTTGCTTCTCCTCTGGCGGGAGAAGACGATT
 CATTCTTTTGAAGGAACTCGAATGAGGACTGCAAGCCTCTCATTACCAGACTAAACCCAAAAT
 TAAGGATAATGGAGATCTGGTTTTGTCAAGCCCAGTAATGTAACACTGCCCAAGTGAACACAGAAAA
 GAAGATTTTCATCGAACTGCGACCCCTGGGTAATTAAGCAAGAGAACTGGGCACAGTTTACTGTCAGG
 CAAGCTTCTCGGAGCAAATAAATGGTAATAAAATGTCTGCCATTTCTGTTTATGGTGTGAGTACCTC
 TGGAGGACAGATGTACCACTATGACATGAATACAGCATCCCTTCTCAACAGCAGGATCAGAAGCCTATT
 CTTAATGTCATTCCACCAATCCCGTTGGTCCGAAAATTGGAATAGGTGCCAAGGATCTGGAGATGACA
 ACTTGACTTCTCGGGACTCTGAACCTCCCTGGTTCGAACAGTTTTTTCTAATGGCTATTCAAGCCCCAG
 CATGAGACCAGATGTAAGCTCTCCTCCATCCAGCTCCTCAACAGCAACAACAGGACCACCTCCCAAACCTC
 TGCTGGTGTGCTCTGATGAAGCTTCAAGATGTCATTATGGAGTCTTAACTTGTGGAAGCTGTAAGTTT
 TCTTCAAAGAGCAGTGAAGGACAGCACAATTACCTATGTGCTGGAAGGAATGATTGCATCATCGATAA
 AATTCGAAGAAAAAACTGCCAGCATGCCGCTATCGAAAATGTCTTCAAGGCTGGAATGAACCTGGAAGCT
 CGAAAAACAAAGAAAAAATAAAGGAATTCAGCAGGCCACTACAGGAGTCTCACAAGAAACCTCTGAAA
 ATCCTGGTAACAAAACAATAGTTCTGCAACGTTACCACAACCTACCCCTACCCTGGTGTCACTGTTGGA
 GGTTATTGAACCTGAAGTGTATATGCAGGATATGATAGCTCTGTTCCAGACTCAACTTGGAGGATCATG
 ACTACGCTCAACATGTTAGGAGGGCGCAAGTATTGCAGCAGTGAATGGGCAAAGGCAATACCAGGTT
 TCAGGAACCTACACCTGGATGACCAATGACCCTACTGCAGTACTCCTGGATGTTTCTTATGGCATTTC
 TCTGGGTGGAGATCATATAGACAATCAAGTGAAACCTGCTGTGTTTTGCTCCTGATCTGATTATTAAT
 GAGCAGAGAATGACTCTACCCTGCATGTACGACCAATGTAACACATGCTGTATGTTTCTCTGAGTTAC
 ACAGGCTTCAAGTATCTTATGAAGAGTATCTGTATGAAAACCTTACTGCTTCTCTTTCAGTTCTTAA
 GGACGGTCTGAAGAGCCAAGAGCTATTTGATGAAATTAGAATGACCTACATCAAAGAGCTAGGAAAAAGCC
 ATTGTCAGAGGGAAGGAACTCCAGCCAGAATGGCAGCGGTTTATCAACTGACAAAACCTTTGGATT
 CTATGCATGAAAATGTTATGTGGTAAAACCAGAAAGCACATCTCACACATTAATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220377 representing NM_001020825
 Red=Cloning site Green=Tags(s)

MDSKESLTPGREENPSSVLAQERGDVMDFYKTLRGGATVKVSASSPSLAVASQSDSKQRLLVDFPKGSV
 SNAQQPDL SKAVSL SMGLYMGETETKVMGNDLGFPOQQQISLSSGETDLKLL EESIANLNRSTVSPENPK
 SSASTAVSAAPTEKEFPKTHSDVSEQQHLKGQGTNGGNVKLYTTDQSTFDILQDLEFSSGSPGKETNE
 SPWRSDLLIDENCLL SPLAGEDDSFLL EGNSNEDCKPLILPDTKPKIKDNGDLVLSPPSNVTL PQVKTEK
 EDFIELCTPGVIKQEKLGTVYCCQASFPGANIIGNKMSAISVHGVSTSGGQMYHYDMNTASLSQQDQKPI
 LNVIPPIPVGSENWNRQCQSGDDNLTSLGTLNFPGRTVFSNGYSSPSMRPDVSSPPSSSSTATTGPPPKL
 CLVCSDEASGCHYGVLTCGSKVFFKRAVEGQHNYLCAGRNDCIIDKIRRKNCPACRYRKCLQAGMNLEA
 RKTKKKIKGIQQATTGVSQETSENPGNKTIVPATLPQLTPTLVSLLEVIEPEVLYAGYDSSVPDSTWRIM
 TTLNMLGGRQVIAAVKAKAIPGFRNLHLDQMTLLQYSWMFLMAFALGWRYSYRQSSANLLCFAPDLIIN
 EQRMTLPCMYDQCKHMLYVSELHRLQVSYEEYLCMKTL LLLSSVPKDGLKSQELFDEIRMTYIKELGKA
 IVKREGNSSQNWRFYQLTKLLDSMHENVMWLKPESTSHTLI

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4417_c02.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001020825

ORF Size: 2226 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_001020825.1](#), [NP_001018661.1](#)

RefSeq Size: 4154 bp

RefSeq ORF: 2229 bp

Locus ID: 2908

UniProt ID: [P04150](#)

Cytogenetics: 5q31.3

Protein Families: Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

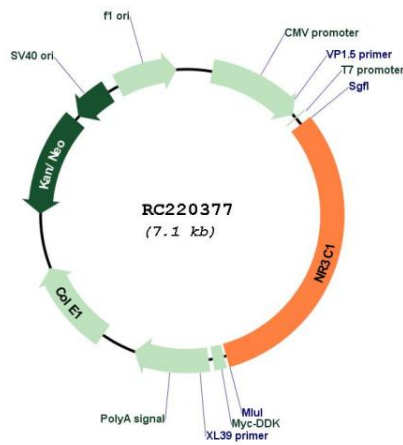
Protein Pathways: Neuroactive ligand-receptor interaction

MW: 81.3 kDa

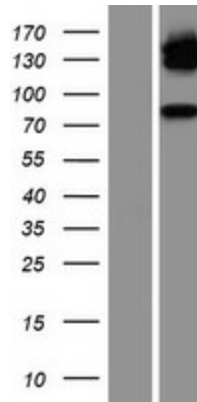
Gene Summary:

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 RC220377



Western blot validation of overexpression lysate (Cat# [LY422680]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220377 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).