

Product datasheet for **RC210397**

Cannabinoid Receptor I (CNR1) (NM_016083) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cannabinoid Receptor I (CNR1) (NM_016083) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cannabinoid Receptor I
Synonyms:	CANN6; CB-R; CB1; CB1A; CB1K5; CB1R; CNR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC210397 representing NM_016083
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGTCGATCCTAGATGGCCTTGCAGATACCACCTTCCGCACCATCACCCTGACCTCCTGTACGTGG
 GCTCAAATGACATTTCAGTACGAAGACATCAAAGGTGACATGGCATCCAAATTAGGGTACTTCCCACAGAA
 ATTCCCTTTAACTTCTTTAGGGGAAGTCCCTTCCAAGAGAAGATGACTGCGGGAGACAACCCCCAGCTA
 GTCCCAGCAGACCAGGTGAACATTACAGAAATTTACAACAAGTCTCTCTCGTCTTCAAGGAGAATGAGG
 AGAACATCCAGTGTGGGAGAACTTTCATGGACATAGAGTGTTCATGGTCTGAACCCAGCCAGCAGCT
 GGCCATTGCAGTCTGTCCCTCACGCTGGGCACCTTACGGTCTGGAGAACCTCCTGGTGTGTGCGTC
 ATCCTCCACTCCCGCAGCCTCCGCTGCAGGCCCTTCTACCACTTCATCGGCAGCCTGGCGGTGGCAGACC
 TCCTGGGAGTGTCAATTTTGTCTACAGCTTATTGACTTCCACGTGTTCCACCGCAAAGATAGCCGCAA
 CGTGTCTCTGTTCAAACGGGTGGGTGACGGCCTCTTCACTGCCTCCGTGGGAGCCTGTTTCTCACA
 GCCATCGACAGGTACATATCCATTACAGGCCCTTGGCCTATAAGAGGATTGTCACCAGGCCAAGGCCG
 TGGTGGCGTTTTGCCTGATGTGGACCATAGCCATTGTGATCGCCGTGCTGCCTCTCTGGGCTGGAAGT
 CGAGAACTGCAATCTGTTTGTCTCAGACATTTCCACACATTGATGAAACCTACCTGATGTTCTGGATC
 GGGGTACCAGCGTACTGCTTCTGTTTATCGTGTATGCGTACATGTATATTCTCTGGAAGGCTCACAGCC
 ACGCCGTCGCGATGATTCAGCGTGGCACCAGAAGAGCATCATATCCACACGTCTGAGGATGGGAAGGT
 ACAGGTGACCCGGCCAGACCAAGCCCGCATGGACATTAGGTTAGCCAAGACCCTGGTCTGATCCTGGTG
 GTGTTGATCATCTGCTGGGCCCCCTGCTTGAATCATGGTGTATGATGTCTTTGGGAAGATGAACAAGC
 TCATTAAGACGGTGTGTTGCAATTCGAGTATGCTGCCTGCTGAACCCATCCATCATCA
 TGCTCTGAGGAGTAAGGACCTGCGACACGCTTTCCGGAGCATGTTTCCCTCTTGTGAAGGCACTGCGCAG
 CCTCTGGATAACAGCATGGGGACTCGGACTGCCTGCACAAACGCAAACAATGCAGCCAGTGTTCACA
 GGGCCGAGAAAGCTGCATCAAGAGCACGGTCAAGATTGCCAAGTAACCATGTCTGTGTCCACAGACAC
 GTCTGCCGAGGCTCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210397 representing NM_016083
 Red=Cloning site Green=Tags(s)

MKSILDGLADTTFRITITDLLYVGSNDIQYEDIKGMASKLGYFPQKFPPLTSFRGSPFQEKMTAGDNPQL
 VPADQVNITFYNKLSLSSFKENEENIQCGENFMDIECFMVLNPSQQLAIAVLSLTLGFTVLENLLVLCV
 ILHSRSLRCRPSYHFIGSLAVADLLGSVIFVYSFIDFHVFHRKDSRNVFLFKLGGVTASF TASVGSFLT
 AIDRYISIHRLAYKRIVTRPKAVVAFCLMWTIAIVIAVLP LLGWNCEKLSVCSDIFPHIDETYLFWI
 GVTSVLLLFIVYAYMYILWKAHSHAVRMIQRGTQKSIIHTSEDGKVQVTRPDQARMDIRLAKTLVLILV
 VLIICWGPLLAIMVYDVF GKMNKLIKTVFAFC SMLCLLNSTVNP IYALRSKDLRHAFRSMFPCSCEGTAQ
 PLDNSMGDSDCLHKHANNAASVHRAAESCIKSTVKIAKVTMSVSTDTSAEAL

TRTRPLEQ**KL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_016083

ORF Size: 1416 bp

OTI Disclaimer: 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_016083.6](#)

RefSeq Size: 5486 bp

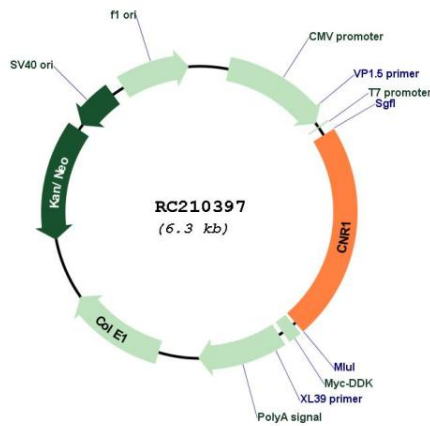
RefSeq ORF: 1419 bp

Locus ID: 1268

UniProt ID: [P21554](#)
Cytogenetics: 6q15
Domains: 7tm_1
Protein Families: Druggable Genome, GPCR, Transmembrane
Protein Pathways: Neuroactive ligand-receptor interaction
MW: 52.7 kDa

Gene Summary: This gene encodes one of two cannabinoid receptors. The cannabinoids, principally delta-9-tetrahydrocannabinol and synthetic analogs, are psychoactive ingredients of marijuana. The cannabinoid receptors are members of the guanine-nucleotide-binding protein (G-protein) coupled receptor family, which inhibit adenylate cyclase activity in a dose-dependent, stereoselective and pertussis toxin-sensitive manner. The two receptors have been found to be involved in the cannabinoid-induced CNS effects (including alterations in mood and cognition) experienced by users of marijuana. Multiple transcript variants encoding two different protein isoforms have been described for this gene. [provided by RefSeq, May 2009]

Product images:



Circular map for RC210397