

## Product datasheet for **RG228917**

### Cannabinoid Receptor I (CNR1) (NM\_001160259) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cannabinoid Receptor I (CNR1) (NM_001160259) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CNR1
Synonyms:	CANN6; CB-R; CB1; CB1A; CB1K5; CB1R; CNR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG228917 representing NM\_001160259  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAGTCGATCCTAGATGGCCTTGCAGATACCACCTTCCGCACCATCACCCTGACCTCCTGTACGTGG  
 GCTCAAATGACATTTCAGTACGAAGACATCAAAGGTGACATGGCATCCAAATTAGGGTACTTCCCACAGAA  
 ATTCCCTTTAACTTCTTTAGGGGAAGTCCCTTCCAAGAGAAGATGACTGCGGGAGACAACCCCCAGCTA  
 GTCCCAGCAGACCAGGTGAACATTACAGAAATTTACAACAAGTCTCTCTCGTCTTCAAGGAGAATGAGG  
 AGAACATCCAGTGTGGGAGAATTCATGGACATAGAGTGTTCATGGTCTGAACCCAGCCAGCAGCT  
 GGCCATTGCAGTCTGTCCCTCACGCTGGGCACCTTACGGTCTGGAGAACCTCCTGGTGTGTGCGTC  
 ATCTCCACTCCCGCAGCTCCGCTGCAGGCTTCTACCCTTCCATCGGCAGCTGGCGGTGGCAGACC  
 TCCTGGGAGTGTCAATTTGTCTACAGCTTATTGACTTCCACGTGTTCCACCGCAAAGATAGCCGCAA  
 CGTGTCTCTGTTCAAACGGGTGGGTACGGCCTCTTACTGCCTCCGTGGGAGCCTGTTCTCTCACA  
 GCCATCGACAGGTACATATCCATTACAGGCCCTGGCCTATAAGAGGATTGTCACCAGGCCAAGGCCG  
 TGGTGGCCTTTGCTGATGTGGACCATAGCCATTGTGATCGCCGTGCTGCCTCTCTGGGCTGGAAGT  
 CGAGAACTGCAATCTGTTTGTCTCAGACATTTCCACACATTGATGAAACCTACCTGATGTTCTGGATC  
 GGGGTACCAGCGTACTGCTTCTGTTTATCGTGTATGCGTACATGTATATCTCTGGAAGGCTCACAGCC  
 ACGCCGTCGCGATGATTCAGCGTGGCACCAGAGAGCATCATATCCACACGTCTGAGGATGGGAAGGT  
 ACAGGTGACCCGGCCAGACCAAGCCCGCATGGACATTAGGTTAGCCAAGACCCTGGTCTGATCCTGGT  
 GTGTTGATCATCTGCTGGGCCCCCTGCTTGAATCATGGTGTATGATGTCTTTGGGAAGATGAACAAGC  
 TCATTAAGACGGTGTGGCATTCTGCAGTATGCTGCCTGCTGAACCCATCCACCCATCATCTA  
 TGCTCTGAGGAGTAAGGACCTGCGACACGCTTTCGGAGCATGTTTCCCTCTTGTGAAGGCACTGCGCAG  
 CCTCTGGATAACAGCATGGGGACTCGGACTGCCTGCACAAACGCAAAACAATGCAGCCAGTGTTCACA  
 GGGCCGAGAAAGCTGCATCAAGAGCACGGTCAAGATTGCCAAGTAACCATGTCTGTGTCCACAGACAC  
 GTCTGCCGAGGCTCTG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG228917 representing NM\_001160259  
 Red=Cloning site Green=Tags(s)

MKSILDGLADTTFRITITDLLVGSNDIQYEDIKGMASKLGYFPQKFPPLTSFRGSPFQEKMTAGDNPQL  
 VPADQVNITEFYNKSLSSFKENEENIQCGENFMDIECFMVLNPSQQLAIAVLSLTLGFTVLENLLVLCV  
 ILHSRSLRCRPSYHFIFIGSLAVADLLGSVIFVYSFIDFHVFHRKDSRNVFLFKLGGVTASFTASVGSFL  
 AIDRYISIHRLAYKRIIVTRPKAVVAFCLMWTIAIVIAVPLLLGWNCEKLSVCSDFPHIDETYLFWI  
 GVTSVLLLFIVYAYMYILWKAHSHAVRMIQRGTQKSIIHTSEDGKQVTRPDQARMDIRLAKTLVLILV  
 VLIICWGPLLAIMVYDVFVKMNLIKTVFAFCMLCLLNSTVNPPIYALRSKDLRHAFRSMFSPCEGTAQ  
 PLDNSMGDSDCLHKHANNAASVHRAAESCIKSTVKIAKVTMSVSTDTSAEAL

**TRTRPLE** – GFP Tag – V

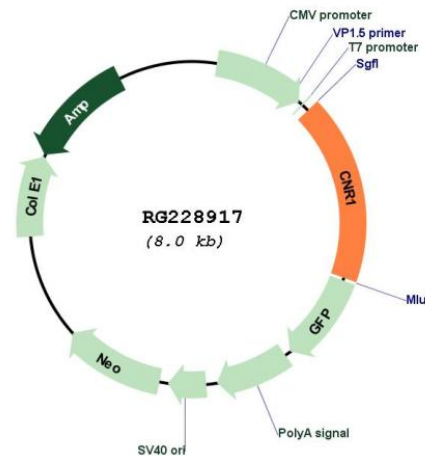
**Restriction Sites:**

Sgfl-MluI

## Cloning Scheme:



## Plasmid Map:



**ACCN:** NM\_001160259

**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).

<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>RefSeq:</b>	<a href="#">NM_001160259.3</a>
<b>RefSeq Size:</b>	5776 bp
<b>RefSeq ORF:</b>	1419 bp
<b>Locus ID:</b>	1268
<b>UniProt ID:</b>	<a href="#">P21554</a>
<b>Cytogenetics:</b>	6q15
<b>Protein Families:</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways:</b>	Neuroactive ligand-receptor interaction
<b>Gene Summary:</b>	<p>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]</p>