

Product datasheet for **RG218922**

Cannabinoid Receptor I (CNR1) (NM_033181) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cannabinoid Receptor I (CNR1) (NM_033181) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cannabinoid Receptor I
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)
ORF Nucleotide Sequence:	>RG218922 representing NM_033181 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTTGCAGATACCACCTTCCGCACCATCACCCTGACCTCCTGTACGTGGGCTCAAATGACATTCA
GTACGAAGACATCAAAGGAGAATGAGGAGAATCCAGTGTGGGAGAATTCATGGACATAGAGTGTTT
CATGGTCTGAACCCAGCCAGCAGCTGGCCATTGCAGTCTGTCCCTCACGCTGGGCACCTTCACGGTC
CTGGAGAACCTCCTGGTGTGTGCGTCATCTCCACTCCCGCAGCCTCCGCTGCAGGCCTTCTACCACT
TCATCGGCAGCCTGGCGTGGCAGACCTCCTGGGAGTGTCAATTTTGTCTACAGCTTCATTGACTCCA
CGTGTTCCACCGCAAAGATAGCCGCAACGTGTTTCTGTTCAAACCTGGGTGGGGTACGGCCTCCTCACT
GCCTCCGTGGGCAGCCTGTTCTCACAGCCATCGACAGGTACATATCCATTACAGGCCCTGGCCTATA
AGAGGATTGTACCAGGCCAAGGCCGTGGTGGCGTTTTGCTGATGTGGACCATAGCCATTGTGATCGC
CGTGCTGCCTCTCCTGGGCTGGAAGTGCAGAACTGCAATCTGTTTGTCTCAGACATTTCCACACATT
GATGAAACCTACCTGATGTTCTGGATCGGGTACCAGCGTACTGCTTCTGTTTCATCGTGTATGCGTACA
TGATATTTCTCTGGAAGGCTCACAGCCAGCCGTCGCGATGATTCAGCGTGGCACCCAGAAGAGCATCAT
CATCCACACGCTGAGGATGGGAAGGTACAGGTGACCCGGCCAGACCAAGCCCGCATGGACATTAGGTTA
GCCAAGACCCTGGTCTGATCCTGGTGGTGTGATCATCTGCTGGGGCCCTCTGCTTGAATCATGGTGT
ATGATGCTTTGGGAAGATGAACAAGCTCATTAAAGACGGTGTGGATTCTGCAGTATGCTCTGCCTGCT
GAACTCCACCGTGAACCCATCATCTATGCTCTGAGGAGTAAGGACCTGCGACACGCTTTCCGGAGCATG
TTTCCCTCTTGTGAAGGCACTGCGCAGCCTCTGGATAACAGCATGGGGACTCGGACTGCCTGCACAAAC
ACGCAAACAATGCAGCCAGTGTTCACAGGGCCGAGAAAGCTGCATCAAGAGCACGGTCAAGATTGCCAA
GGTAACCATGTCTGTGTCCACAGACACGCTGCCGAGGCTCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG218922 representing NM_033181
Red=Cloning site Green=Tags(s)

MALQIPPSAPSPLTSCWAQMTFSTKTSKENEENIQCGENFMDIECFMVLNPSQQLAIAVLSLTLGTFTV
 LENLLVLCVILHSRSLRCRPSYHFIGSLAVADLLGSVIFVYSFIDFHVFRKDSRNVFLFKLGGVTASFT
 ASVGSFLTAIDRYISIHRLAYKRIVTRPKAVVAFCLMWTIAIIVIAVLP LLGWNCEKLQSVCSDFPHI
 DETYLMFWIGVTSVLLLLFIVYAYMYILWKAHSHAVRMIQRGTQKSIIHTSEDGKVQVTRPDQARMDIRL
 AKTLVLIIVVLIICWGPLLAIMVYDVFGKMNKLIKTVFAFC SMLCLLNSTVNP I IYALRSKDLRHAFRSM
 FPSCEGTAQPLDNSMGDS DCLHKHANNAASVHRAAESCIKSTVKIAKVTMSVSTDTSAEAL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_033181

ORF Size: 1233 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.

RefSeq: [NM_033181.2](#), [NP_149421.1](#)

RefSeq Size: 5307 bp

RefSeq ORF: 1320 bp

Locus ID: 1268

UniProt ID: [P21554](#)

Cytogenetics: 6q15

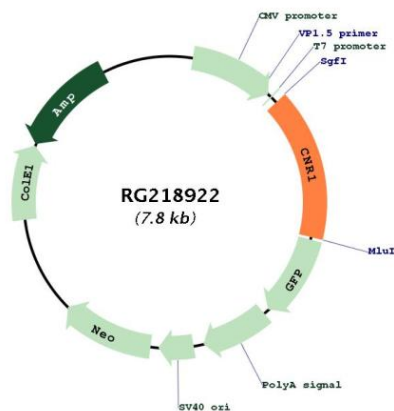
Domains: 7tm_1

Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

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 RG218922