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Product datasheet for SC111611

Cannabinoid Receptor I (CNR1) (NM_016083) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cannabinoid Receptor I (CNR1) (NM_016083) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cannabinoid Receptor I
Synonyms:	CANN6; CB-R; CB1; CB1A; CB1K5; CB1R; CNR
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC111611 sequence for NM_016083 edited (data generated by NextGen Sequencing)

ATGAAGTCGATCCTAGATGGCCTTGCAGATACCACCTTCCGCACCATCACCACTGACCTC
CTGTACGTGGGCTCAAATGACATTCAGTACGAAGACATCAAAGGTGACATGGCATCCAAA
TTAGGGTACTTCCCACAGAAATTCCCTTTAACTTCCTTTAGGGGAAGTCCCTTCCAAGAG
AAGATGACTGCGGGAGACAACCCCCAGCTAGTCCCAGCAGACCAGGTGAACATTACAGAA
TTTTACAACAAGTCTCTCTCGTCCTTCAAGGAGAATGAGGAGAACATCCAGTGTGGGGAG
AACTTCATGGACATAGAGTGTTTCATGGTCCTGAACCCCAGCCAGCAGCTGGCCATTGCA
GTCCTGTCCCTCACGCTGGGCACCTTCACGGTCCTGGAGAACCTCCTGGTGCTGTGCGTC
ATCCTCCACTCCCGCAGCCTCCGCTGCAGGCCTTCCTACCACTTCATCGGCAGCCTGGCG
GTGGCAGACCTCCTGGGGAGTGTCATTTTTGTCTACAGCTTCATTGACTTCCACGTGTTC
CACCGCAAAGATAGCCGCAACGTGTTTCTGTTCAAACTGGGTGGGGTCACGGCCTCCTTC
ACTGCCTCCGTGGGCAGCCTGTTCCTCACAGCCATCGACAGGTACATATCCATTCACAGG
CCCCTGGCCTATAAGAGGATTGTCACCAGGCCCAAGGCCGTGGTGGCGTTTTGCCTGATG
TGGACCATAGCCATTGTGATCGCCGTGCTGCCTCTCCTGGGCTGGAACTGCGAGAAACTG
CAATCTGTTTGCTCAGACATTTTCCCACACATTGATGAAACCTACCTGATGTTCTGGATC
GGGGTCACCAGCGTACTGCTTCTGTTCATCGTGTATGCGTACATGTATATTCTCTGGAAG
GCTCACAGCCACGCCGTCCGCATGATTCAGCGTGGCACCCAGAAGAGCATCATCATCCAC
ACGTCTGAGGATGGGAAGGTACAGGTGACCCGGCCAGACCAAGCCCGCATGGACATTAGG
TTAGCCAAGACCCTGGTCCTGATCCTGGTGGTGTTGATCATCTGCTGGGGCCCTCTGCTT
GCAATCATGGTGTATGATGTCTTTGGGAAGATGAACAAGCTCATTAAGACGGTGTTTGCA
TTCTGCAGTATGCTCTGCCTGCTGAACTCCACCGTGAACCCCATCATCTATGCTCTGAGG
AGTAAGGACCTGCGACACGCTTTCCGGAGCATGTTTCCCTCTTGTGAAGGCACTGCGCAG
CCTCTGGATAACAGCATGGGGGACTCGGACTGCCTGCACAAACACGCAAACAATGCAGCC
AGTGTTCACAGGGCCGCAGAAAGCTGCATCAAGAGCACGGTCAAGATTGCCAAGGTAACC
ATGTCTGTGTCCACAGACACGTCTGCCGAGGCTCTGTGA

Clone variation with respect to NM_016083.4

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_016083 unedited

ACTCACTATAGGGCGGCCCGCGATTCGGCACGAGGGCCTAATCAAAGACTGAGGTTATGA
AGTCGATCCTAGATGGCCTTGCAGATACCACCTTCCGCACCATCACCACTGACCTCCTGT
ACGTGGGCTCAAATGACATTCAGTACGAAGACATCAAAGGTGACATGGCATCCAAATTAG
GGTACTTCCCACAGAAATTCCCTTTAACTTCCTTTAGGGGAAGTCCCTTCCAAGAGAAGA
TGACTGCGGGAGACAACCCCCAGCTAGTCCCAGCAGACCAGGTGAACATTACAGAATTTT
ACAACAAGTCTCTCTCGTCCTTCAAGGAGAATGAGGAGAACATCCAGTGTGGGGAGAACT
TCATGGACATAGAGTGTTTCATGGTCCTGAACCCCAGCCAGCAGCTGGCCATTGCAGTCC
TGTCCCTCACGCTGGGCACCTTCACGGTCCTGGAGAACCTCCTGGAGCTGTGCGTCATCC
TCCACTCCCGCAGCCTCCGCTGCAGGCCTTCCTACCACTTCATCGGCAGCCTGGCGGTGG
CAGACCTCCTGGGGAGTGTCATTTTTGTCTACAGCTTCATTGACTTCCACGTGTTCCACC
GCATAGATAGCCGCAACGTGTTTCTGTTCAAACTGGGTGGGGTCACGGNCTCCTTCACTG
CCTACGTGGGCAGCCTGTTCCTCACAGCCATCGACAGGTACATATCCATTCACAGGCCCC
TGGCCTATAAGAGGATTGTCACCAGGCCCAAGGCCGCTGGTGGCGTTTTGCCTGATGTGC
ACCATAGCCATTGTGATCGCCGTGCTGCCTCTTCTGGGCTGGGACTGCNAGAACTGCAAT
CTGGTTGCTCAGACATTTCCCACAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_016083 unedited
NNNGGGTATACTATGNNACCGCGGCCGCATNCTAGNGATCGATTTTTTTTTTTTTTTTTT
TTGTTCTTCATGGTAATCTAGAATTTTTATTTGATTCCAGGTAACTTTGGACAATAGACA
TGATGAGATGTTTTCTCTTTGAATAAGTTAACAGTTTAATTACATTGAAATAAAATATAC
TGTGGGCTTAATACATTGTAAATATTACAGAAGAAGTACTACTTTGCTATAGTAATTTAA
TGACTGAAGCTACATTTAATAACAATCTTACCAGTACTTGTATACAAAGTATTATACAGA
TTACTAACGAAGATATTGCAGTGGTTGCAACGATGTTACCAGCTCAACAAACATCTAACA
ATACAATATTCTTCTAAGAGGAAAAGTAATAATGTTAGATTTACAGACAATAAAGAGTCA
TGTTTCCCGCTTGAAACATTGGAAATAAATTTGAATCCAGATACAAGAAAAGGTTTCCTT
TCTTGGGAACTCTGATCCCCAGTAGGCCTAGTACAGTCAATTTACATGAAGATAGCTTTT
AAGATGCCACGGCAATGTAAAGAAACTCTCCCATCCGAAAATTACTGATTTGTAGGCCAC
CTGCTCAAACATCTGACTTTTTAGAAACCTATTTACATACATTCAGCCCAAATCAATAGA
AAGAATGTTTTTTTCTATATTACCATAGGCACTTGTAACCTTTCCACCAAAGGGCCGTGC
GAGACAATCAATGTTAAAAGCCTTGGCCCCCCTTTAGGAAAATTTAAAGCCCCACCAATT
TTCACCTCGAGTGCGGCAATCCCACTTTTGGCTGATTCGGCGGGACCCTTAGACAGCCGC
GCACGGCCACCCATTAACCACCGGACCGCATCACATCGCTCAN

Restriction Sites: NotI-NotI

ACCN: NM_016083

Insert Size: 5700 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

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_016083.3, NP_057167.2

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
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] Transcript Variant: This variant (1) encodes the longer isoform (a). Variant 1 has also been called CB1A by PubMed ID: 15289816. Variants 1, 3, 4 and 5 all encode isoform a.