

Product datasheet for **RG210224**

Cannabinoid Receptor II (CNR2) (NM_001841) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cannabinoid Receptor II (CNR2) (NM_001841) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cannabinoid Receptor II
Synonyms:	CB-2; CB2; CX5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210224 representing NM_001841 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAATGCTGGGTGACAGAGATAGCCAATGGCTCCAAGGATGGCTTGGATTCCAACCCATGAAGG
ATTACATGATCCTGAGTGGTCCCCAGAAGACAGCTGTTGCTGTGTTGTGCACTCTTCTGGGCCTGCTAAG
TGCCCTGGAGAACGTGGCTGTGCTCTATCTGATCCTGTCTCCACCAACTCCGCCGGAAGCCCTCATA
CTGTTTCATTGGCAGCTTGGCTGGGGCTGACTTCCTGGCCAGTGTGGTCTTGCATGCAGCTTTGTGAATT
TCCATGTTTTCCATGGTGTGATTCCAAGGCTGTCTTCTGCTGAAGATTGGCAGCGTGACTATGACCTT
CACAGCCTCTGTGGGTAGCCTCCTGCTGACCGCATTGACCGATACCTCTGCCTGCGCTATCCACCTTCC
TACAAAGCTCTGCTCACCCGTGGAAGGGCACTGGTGACCTGGGCATCATGTGGGTCTCTCAGCACTAG
TCTCTACCTGCCCTCATGGGATGGACTTGTGTCCCAGGCCCTGCTCTGAGCTTTTCCCACTGATCCC
CAATGACTACCTGCTGAGCTGGCTCCTGTTTCATCGCCTTCTCTTTCCGGAATCATCTACACCTATGGG
CATGTTCTCTGGAAGGCCATCAGCATGTGGCCAGCTTGTCTGGCCACCAGGACAGGCAGGTGCCAGGAA
TGGCCGAATGAGGCTGGATGTGAGGTTGGCCAAGACCCTAGGGCTAGTGTGGCTGTGCTCCTCATCTG
TTGTTTCCAGTGTGGCCCTCATGGCCACAGCCTGGCCACTACGCTCAGTGACCAGGTCAAGAAGGCC
TTTGCTTTCTGCTCCATGCTGTGCCTCATCAACTCCATGGTCAACCCGTGCTATGCTACGGAGTG
GAGAGATCCGCTCCTCTGCCATCACTGCCTGGCTCACTGGAAGAAGTGTGTGAGGGCCTTGGGTCAGA
GGCAAAAGAAGAAGCCCCGAGATCCTCAGTCACCGAGACAGAGGCTGATGGGAAAATCACTCCGTGGCCA
GATTCCAGAGATCTAGACCTCTCTGATTGC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG210224 representing NM_001841
 Red=Cloning site Green=Tags(s)

MEECWTEIANGSKDGLDSNPMKDYMILSGPQKTAVAVLCTLLGLLSALENVAVLYLILSSHQLRRKPSY
 LFIGSLAGADFLASVVFACSFVNFHVFHGVDSKAVFLLKIGSVMTFTASVGSLLLTAIDRYLCLRYP
 YKALLTRGRALVTLGIMWVLSALVSYLPLMGWTCPPRCELFPLIPNDYLLSWLLFIAFLFSGIIYTYG
 HVLWKAHQHVASLSGHQDRQVPGMARMRLDVRLAKTLGLVLAVLLICWFPVLALMAHSLATLSDQVKKA
 FAFCSMLCLINSMYNPVIYALRSGEIRSSAHHCLAHWKKCVRGLGSEAKEEAPRSSVTETEDGKITPWP
 DSRDLDSLDC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001841

ORF Size: 1080 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 Size: 1789 bp

RefSeq ORF: 1083 bp

Locus ID: 1269

UniProt ID: [P34972](#)

Cytogenetics: 1p36.11

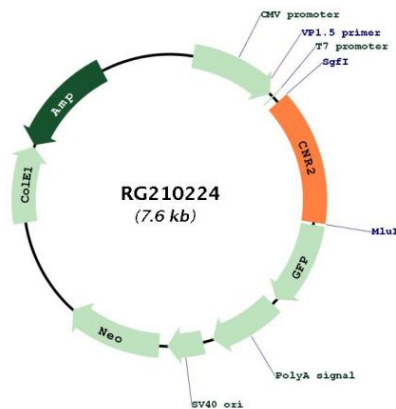
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

MW: 39.7 kDa

Gene Summary: The cannabinoid delta-9-tetrahydrocannabinol is the principal psychoactive ingredient of marijuana. The proteins encoded by this gene and the cannabinoid receptor 1 (brain) (CNR1) gene have the characteristics of a guanine nucleotide-binding protein (G-protein)-coupled receptor for cannabinoids. They inhibit adenylate cyclase activity in a dose-dependent, stereoselective, and pertussis toxin-sensitive manner. These proteins have been found to be involved in the cannabinoid-induced CNS effects (including alterations in mood and cognition) experienced by users of marijuana. The cannabinoid receptors are members of family 1 of the G-protein-coupled receptors. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG210224