

## Product datasheet for RC204499L1

#### OriGene Technologies, Inc.

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## beta 2 Adrenergic Receptor (ADRB2) (NM\_000024) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** beta 2 Adrenergic Receptor (ADRB2) (NM\_000024) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: beta 2 Adrenergic Receptor

Synonyms: ADRB2R; ADRBR; B2AR; BAR; BETA2AR

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204499).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_000024

ORF Size: 1239 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 <a href="mailto:customercom">customercom</a> 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. <u>More info</u>

**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:** <u>NM 000024.3</u>

 RefSeq Size:
 2015 bp

 RefSeq ORF:
 1242 bp

 Locus ID:
 154

 UniProt ID:
 P07550

 Cytogenetics:
 5q32

Domains: 7tm\_1

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Calcium signaling pathway, Endocytosis, Neuroactive ligand-receptor interaction

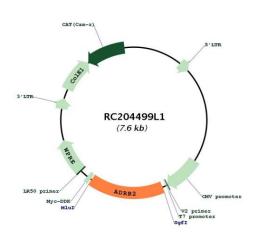
**MW:** 46.4 kDa



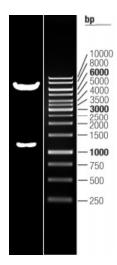
### **Gene Summary:**

This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an adenylyl cyclase, cAMP-dependent kinase, and the counterbalancing phosphatase, PP2A. The assembly of the signaling complex provides a mechanism that ensures specific and rapid signaling by this G protein-coupled receptor. This receptor is also a transcription regulator of the alpha-synuclein gene, and together, both genes are believed to be associated with risk of Parkinson's Disease. This gene is intronless. Different polymorphic forms, point mutations, and/or downregulation of this gene are associated with nocturnal asthma, obesity, type 2 diabetes and cardiovascular disease. [provided by RefSeq, Oct 2019]

# **Product images:**



Circular map for RC204499L1



Double digestion of RC204499L1 using Sgfl and Mlul