

Product datasheet for RC214597L3

OriGene Technologies, Inc.

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Nicotinic Acetylcholine Receptor alpha 4 (CHRNA4) (NM_000744) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Nicotinic Acetylcholine Receptor alpha 4 (CHRNA4) (NM_000744) Human Tagged Lenti ORF

Clone

Tag: Myc-DDK

Symbol: Nicotinic Acetylcholine Receptor alpha 4

Synonyms: BFNC; EBN; EBN1; NACHR; NACHRA4; NACRA4

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

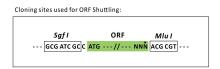
ORF Nucleotide

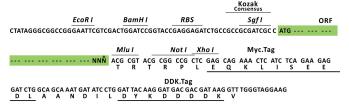
The ORF insert of this clone is exactly the same as(RC214597).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM 000744





Nicotinic Acetylcholine Receptor alpha 4 (CHRNA4) (NM_000744) Human Tagged Lenti ORF Clone - RC214597L3

ORF Size: 1881 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: <u>NM 000744.2</u>

 RefSeq Size:
 3773 bp

 RefSeq ORF:
 1884 bp

 Locus ID:
 1137

 UniProt ID:
 P43681

Cytogenetics: 20q13.33

Protein Families: Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

MW: 69.96 kDa

Gene Summary: This gene encodes a nicotinic acetylcholine receptor, which belongs to a superfamily of

ligand-gated ion channels that play a role in fast signal transmission at synapses. These pentameric receptors can bind acetylcholine, which causes an extensive change in conformation that leads to the opening of an ion-conducting channel across the plasma membrane. This protein is an integral membrane receptor subunit that can interact with either nAChR beta-2 or nAChR beta-4 to form a functional receptor. Mutations in this gene cause nocturnal frontal lobe epilepsy type 1. Polymorphisms in this gene that provide protection against nicotine addiction have been described. Alternative splicing results in

multiple transcript variants. [provided by RefSeq, Feb 2012]