

Product datasheet for SC334781

OriGene Technologies, Inc.

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CHRNA10 (NM 001303035) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CHRNA10 (NM_001303035) Human Untagged Clone

Tag: Tag Free Symbol: CHRNA10 **Mammalian Cell** Neomycin

Selection:

Vector:

pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL)

>NCBI ORF sequence for NM_001303035, the custom clone sequence may differ by one or **Fully Sequenced ORF:**

more nucleotides

ATGCCGGCGCGCGCGCGCTGCTCACCTACGGCTGCTCCCGAGCCCTACCCCGACGTCACCTTCACGC TGCTGCTGCGCCGCCGCCGCCTACGTGTGCAACCTGCTGCTGCCCTGCGTGCTCATCTCGCTGCT TGCGCCGCTCGCCTTCCACCTGCCGACTCAGGCGAGAAGGTGTCGCTGGGCGTCACCGTGCTGCTG GCGCTCACCGTCTTCCAGTTGCTGCTGGCCGAGAGCATGCCACCGGCCGAGAGCGTGCCGCTCATCGGGA AGTACTACATGGCCACTATGACCATGGTCACATTCTCAACAGCACTCACCATCCTTATCATGAACCTGCA TTACTGTGGTCCCAGTGTCCGCCCAGTGCCAGCCTGGGCTAGGGCCCTCCTGCTGGGACACCTGGCACGG GGCCTGTGCGTGCGGGAAAGAGGGGAGCCCTGTGGGCAGTCCAGGCCACCTGAGTTATCTCCTAGCCCCC AGTCGCCTGAAGGAGGGGCTGGCCCCCCAGCGGGCCCTTGCCACGAGCCACGATGTCTGTGCCGCCAGGA AGCCCTACTGCACCACGTAGCCACCATTGCCAATACCTTCCGCAGCCACCGAGCTGCCCAGCGCTGCCAT GAGGACTGGAAGCGCCTGGCCCGTGTGATGGACCGCTTCTTCCTGGCCATCTTCTTCTCCATGGCCCTGG

Restriction Sites: Sgfl-Mlul

ACCN: NM_001303035

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

> point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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).



TCATGAGCCTCCTGGTGCTGGTGCAGGCCCTGTGA



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 001303035.1</u>, <u>NP 001289964.1</u>

RefSeq Size: 1957 bp
RefSeq ORF: 735 bp
Locus ID: 57053
UniProt ID: Q9GZZ6
Cytogenetics: 11p15.4

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

Gene Summary: Ionotropic receptor with a probable role in the modulation of auditory stimuli. Agonist

binding may induce an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. The channel is permeable to a range of divalent cations including calcium, the influx of which may activate a potassium current which hyperpolarizes the cell membrane. In the ear, this may lead to a reduction in basilar membrane motion, altering the activity of auditory nerve fibers and reducing the range of dynamic hearing. This may protect against acoustic trauma.

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) uses two alternate splice sites at an internal exon compared to variant 1. These differences result in translation initiation at a downstream inframe start site through ribosomal re-initiation or leaky scanning. The encoded isoform (b) is shorter at the N-terminus compared to isoform a. Variants 2 and 3 both encode the same

isoform (b).