*h*CHRNA3 VersaClone cDNA

Catalog Number: RDC0695

Specifications:

Gene:	*h*CHRNA3
Accession:	NP_000734
Insert size:	1530bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

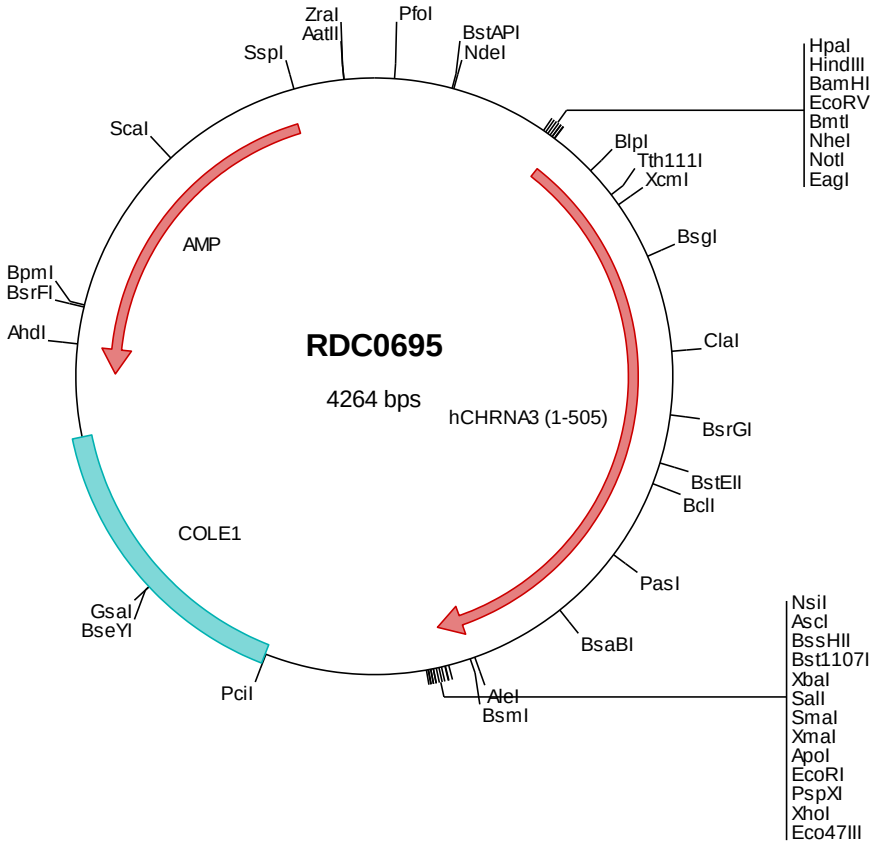
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*CHRNA3 cDNA Plasmid

CHRNA3 cholinergic receptor, nicotinic, alpha 3 (neuronal) [*Homo sapiens* (human)]

Also known as: LNCR2; PAOD2; NACHRA3

Summary:
CHRNA3 is a member of the nicotinic acetylcholine receptor family of proteins. It forms a pentameric complex comprised of both alpha and beta subunits. CHRNA3 is a ligand-gated ion channel that plays a role in neurotransmission. Polymorphisms in CHRNA3 have been associated with an increased risk of smoking initiation and an increased susceptibility to lung cancer.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC0695 Plasmid DNA Sequence

```
   1  tcgcgcgttt cggtgatgac ggtgaaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atgggctctg gcccgctctc gctgcccctg gcgctgtcgc cgccacgact
 501  gctgctgctg ctgctgctgt ctctgctgcc agtggccagg gcctcagagg ctgagcaccg tctatttgag cggctgtttg aagattacaa tgagatcatc
 601  cggcctgtgg ccaacgtgtc tgacccagtc atcatccatt tcgaggtgtc catgtctcag ctggtgaagg tggatgaagt aaaccagatc atggagacca
 701  acctgtggct caagcaaatc tggaatgact acaagctgaa gtggaacccc tctgactatg gtggggcaga gttcatgcgt gtccctgcac agaagatctg
 801  gaagccagac attgtgctgt ataacaatgc tgttggggat ttccaggtgg acgacaagac caaagcctta ctcaagtaca ctggggaggt gacttggata
 901  cctccggcca tctttaagag ctcctgtaaa atcgacgtga cctacttccc gtttgattac caaaactgta ccatgaagtt cggttcctgg tcctacgata
1001  aggcgaaaat cgatctggtc ctgatcggct cttccatgaa cctcaaggac tattgggaga gcggcgagtg ggccatcatc aaagccccag gctacaaaca
1101  cgacatcaag tacaactgct gcgaggagat ctaccccgac atcacatact cgctgtacat ccggcgcctg cccttgttct acaccatcaa cctcatcatc
1201  ccctgcctgc tcatctcctt cctcactgtg ctcgtcttct acctgccctc cgactgcggt gagaaggtga ccctgtgcat ttctgtcctc ctctccctga
1301  cggtgtttct cctggtgatc actgagacca tcccttccac ctcgctggtc atccccctga ttggagagta cctcctgttc accatgattt ttgtaacctt
1401  gtccatcgtc atcaccgtct tcgtgctcaa cgtgcactac agaaccccga cgacacacac aatgccctca tgggtgaaga ctgtattctt gaacctgctc
1501  cccagggtca tgttcatgac caggccaaca agcaacgagg gcaacgctca gaagccgagg cccctctacg gtgccgagct ctcaaatctg aattgcttca
1601  gccgcgcaga gtccaaaggc tgcaaggagg gctacccctg ccaggacggg atgtgtggtt actgccacca ccgcaggata aaaatctcca atttcagtgc
1701  taacctcacg agaagctcta gttctgaatc tgttgatgct gtgctgtccc tctctgcttt gtcaccagaa atcaaagaag ccatccaaag tgtcaagtat
1801  attgctgaaa atatgaaagc acaaaatgaa gccaaagaga ttcaagatga ttggaagtat gttgccatgg tgattgatcg tatttttctg tgggttttca
1901  ccctggtgtg cattctaggg acagcaggat tgtttctgca acccctgatg gccagggaag atgcataagg cgcgccagta tactctagag tcgacacccg
2001  gggaattcct cgagcgctcg tctctagctt ggcgtaatca tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca caacatacga
2101  gccggaagca taaagtgtaa agcctggggt gcctaatgag tgagctaact cacattaatt gcgttgcgct cactgcccgc tttccagtcg ggaaacctgt
2201  cgtgccagct gcattaatga atcggccaac gcgcggggag aggcggtttg cgtattgggc gctcttccgc ttcctcgctc actgactcgc tgcgctcggt
2301  cgttcggctg cggcgagcgg tatcagctca ctcaaaggcg gtaatacggt tatccacaga atcaggggat aacgcaggaa agaacatgtg agcaaaaggc
2401  cagcaaaagg ccaggaaccg taaaaaggcc gcgttgctgg cgtttttcca taggctccgc cccctgacg agcatcacaa aaatcgacgc tcaagtcaga
2501  ggtggcgaaa cccgacagga ctataaagat accaggcgtt tccccctgga agctccctcg tgcgctctcc tgttccgacc ctgccgctta ccggatacct
2601  gtccgccttt ctcccttcgg gaagcgtggc gctttctcaa tgctcacgct gtaggtatct cagttcggtg taggtcgttc gctccaagct gggctgtgtg
2701  cacgaacccc ccgttcagcc cgaccgctgc gccttatccg gtaactatcg tcttgagtcc aacccggtaa gacacgactt atcgccactg gcagcagcca
2801  ctggtaacag gattagcaga gcgaggtatg taggcggtgc tacagagttc ttgaagtggt ggcctaacta cggctacact agaaggacag tatttggtat
2901  ctgcgctctg ctgaagccag ttaccttcgg aaaaagagtt ggtagctctt gatccggcaa acaaaccacc gctggtagcg gtggtttttt tgtttgcaag
3001  cagcagatta cgcgcagaaa aaaaggatct caagaagatc ctttgatctt ttctacgggg tctgacgctc agtggaacga aaactcacgt taagggattt
3101  tggtcatgag attatcaaaa aggatcttca cctagatcct tttaaattaa aaatgaagtt ttaaatcaat ctaaagtata tatgagtaaa cttggtctga
3201  cagttaccaa tgcttaatca gtgaggcacc tatctcagcg atctgtctat ttcgttcatc catagttgcc tgactccccg tcgtgtagat aactacgata
3301  cgggagggct taccatctgg ccccagtgct gcaatgatac cgcgagaccc acgctcaccg gctccagatt tatcagcaat aaaccagcca gccggaaggg
3401  ccgagcgcag aagtggtcct gcaactttat ccgcctccat ccagtctatt aattgttgcc gggaagctag agtaagtagt tcgccagtta atagtttgcg
3501  caacgttgtt gccattgcta caggcatcgt ggtgtcacgc tcgtcgtttg gtatggcttc attcagctcc ggttcccaac gatcaaggcg agttacatga
3601  tcccccatgt tgtgcaaaaa agcggttagc tccttcggtc ctccgatcgt tgtcagaagt aagttggccg cagtgttatc actcatggtt atggcagcac
3701  tgcataattc tcttactgtc atgccatccg taagatgctt ttctgtgact ggtgagtact caaccaagtc attctgagaa tagtgtatgc ggcgaccgag
3801  ttgctcttgc ccggcgtcaa tacgggataa taccgcgcca catagcagaa ctttaaaagt gctcatcatt ggaaaacgtt cttcggggcg aaaactctca
3901  aggatcttac cgctgttgag atccagttcg atgtaaccca ctcgtgcacc caactgatct tcagcatctt ttactttcac cagcgtttct gggtgagcaa
4001  aaacaggaag gcaaaatgcc gcaaaaaagg gaataagggc gacacggaaa tgttgaatac tcatactctt cctttttcaa tattattgaa gcatttatca
4101  gggttattgt ctcatgagcg gatacatatt tgaatgtatt tagaaaaata aacaaatagg ggttccgcgc acatttcccc gaaaagtgcc acctgacgtc
4201  taagaaacca ttattatcat gacattaacc tataaaaata ggcgtatcac gaggcccttt cgtc
```

> RDC0695 Translated Insert Sequence

```
   1  mgsgplslpl alspprllll lllsllpvar aseaehrlfe rlfedyneii rpvanvsdpv iihfevsmsq lvkvdevnqi metnlwlkqi wndyklkwnp
 101  sdyggaefmr vpaqkiwkpd ivlynnavgd fqvddktkal lkytgevtwi ppaifkssck idvtyfpfdy qnctmkfgsw sydkakidlv ligssmnlkd
 201  ywesgewaii kapgykhdik yncceeiypd ityslyirrl plfytinlii pcllisfltv lvfylpsdcg ekvtlcisvl lsltvfllvi tetipstslv
 301  ipligeyllf tmifvtlsiv itvfvlnvhy rtptthtmps wvktvflnll prvmfmtrpt snegnaqkpr plygaelsnl ncfsraeskg ckegypcqdg
 401  mcgychhrri kisnfsanlt rssssesvda vlslsalspe ikeaiqsvky iaenmkaqne akeiqddwky vamvidrifl wvftlvcilg taglflqplm
 501  areda
```