

## Product datasheet for **RC202886**

### Vesicular Acetylcholine Transporter (SLC18A3) (NM\_003055) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Vesicular Acetylcholine Transporter (SLC18A3) (NM_003055) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Vesicular Acetylcholine Transporter
Synonyms:	CMS21; VACHT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC202886 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAATCCGCGAACCTGCGGGCCAGGCCGGCGGCCACCAAGCTGTCGGAGGCTGTGGGCGCG  
 CGCTGCAGGAGCCCGGGCGCAGAGGCGCTGGTCTTGTATCGTGTGGTGGCCTGTTACTGGACAA  
 CATGCTGTACATGGTCATCGTGCCCATAGTCCCGACTACATCGCCACATGCGCGGGGGCGCGAGGGC  
 CCCACCCGGACTCCCGAGGTGTGGGAGCCACCCTGCCGCTGCCACTCCGGCCAATGCCAGCGCTACA  
 CGGCCAACACCTCGGCGTCCCGACAGCTGCGTGGCCAGCGGGCTCAGCCCTTCGCCCCGCTACCCTAC  
 GGAGAGCGAAGACGTGAAGATCGGGGTGCTGTTTGTCTCAAGGCTATCCTGCAGCTGCTAGTGAACCC  
 TTGAGCGGGCCCTTCATCGACCGCATGAGCTACGACGTCCGCTGCTGATCGGCCTGGGCGTCATGTTCC  
 CCTCTACAGTCTGTTCCCTTCGCCGAGGACTACGCCACGCTGTTCCGGCGCGCAGCCTGCAGGGCCT  
 GGGCTCAGCCTTCGCCGACAGCTCTGGCATAGCCATGATCGCCGATAAGTACCCGGAGGACCCGGAGCGC  
 AGTCGTGCACTGGGCGTGGCGCTGGCCTTCATTAGCTTCGGAAGCCTAGTGGCCCCGCCCTTCGGGGGCA  
 TCCTCTATGAGTTCGCCGCAAGCGCTGCCCTTCTTGGTGTAGCTGCCGTGTCGCTCTTTGACGCGCT  
 GTTGCTGCTGGCAGTGGCCAAACCCTTCTCGGGCGCTGCACGGGCTCGGGCCAACCTGCCAGTGGGCACT  
 CCCATCCACCGCCTCATGCTAGACCCCTACATTGCCGTGGTGGCCGGCGCGCTCACACCTGTAACATTC  
 CCCTCGCCTTCTCGAACCCACCATTGCCACGTGGATGAAGCATAACGATGGCGGCTTCCGAGTGGGAGAT  
 GGGCATGGCCTGGCTGCCGGCCTTCGTGCCTCATGTGCTGGGCGTCTACCTACCGTGGCCTGGCGGGC  
 CGCTACCCACACCTGCAGTGGCTGACGGCGCGCTTGGGCTGGCTGTGATCGGCGCCAGCTCGTGCATCG  
 TGCCCGCTGCCGCTCCTTCGCCCGCTAGTGGTCTCACTATGCGGCCTCTGTTTTGGCATAGCCCTAGT  
 CGACACGCACTGCTGCCACGCTCGCCTTCTGGTGGACGTGGCCATGTCTCAGTCTATGGCAGCGTC  
 TACGCCATCGCCGACATCTCTATTTCGGTGGCCTACGCGCTCGGGCCATAGTGGCAGGCCACATTGTGC  
 ACTCGCTGGGCTTTGAGCAGCTCAGCCTTGGCATGGGACTGGCCAACCTGCTCTATGCTCCCGTCTTGCT  
 GCTGCTCCGCAACGTGGGCTCCTGACGCGCTCCCGTTCGAGCGCGATGTGCTGCTTGTAGGCCACCG  
 CAAGGTCTGTACGATGCGGTGCGCTGCGTGGCGCTCTGTGCTGGCCAGGACGGCGAGCCTCGCAGCC  
 CGCCTGGCCCTTTGATGAGTGCAGGACGACTACAATACTACTACACCCGAGC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC202886 protein sequence  
 Red=Cloning site Green=Tags(s)

MESAEPAGQARAATKLEAVGAALQEPRRQRRLVIVVCVALLLDNMLYMVIVPIVPDYIAHMRGGGEG  
 PTRTPEVWEPTLPLTPANASAYTANTSASPTAAWPAGSALRPRYPTESEDKIGVLFASKAILQLLVNP  
 LSGPFIDRMSYDVPLLIGLVMFASVLFVFAEDYATLFAARSLQGLGSFADTSGIAMIADKYPEEPER  
 SRALGVALAFISFGSLVAPPFGGILYEFAGKRVPLVLAASVSLFDALLLAVAKPFSAAARANLPGVT  
 PIHRLMLDPYIAVVAGALTTCNIPLAFLEPTIATWMKHTMAASEWEMGMWLPFVPHVLGVYLVTRLAA  
 RYPHLQWLYGALGLAVIGASSIVPACRSFAPLVVSLCGLCFGIALVDTALLPTLAFLDVVRHVSVYGSV  
 YAIADISYSVAYALGPIVAGHIVHSLGFEQLSLGMGLANLLYAPVLLLLRNVLTRSRSERDVLLEDEPP  
 QGLYDAVRLRERPVSGQDGEPRSPGPFDECEDDYNYYYYTRS

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6410\\_g06.zip](https://cdn.origene.com/chromatograms/mk6410_g06.zip)

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_003055

ORF Size: 1596 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: [NM\\_003055.1](#), [NP\\_003046.1](#)

RefSeq Size: 2440 bp

RefSeq ORF: 1599 bp

Locus ID: 6572

UniProt ID: [Q16572](#)

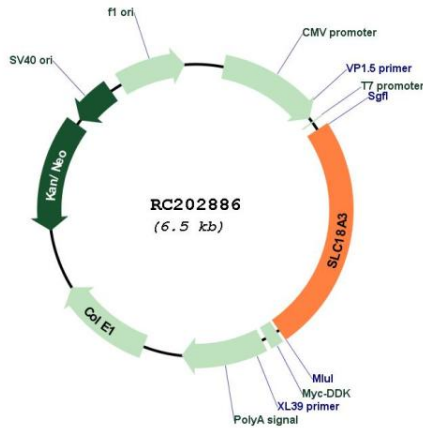
Cytogenetics: 10q11.23

**Protein Families:** Druggable Genome, Transmembrane

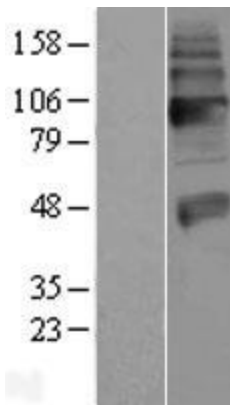
**MW:** 57 kDa

**Gene Summary:** This gene is a member of the vesicular amine transporter family. The encoded transmembrane protein transports acetylcholine into secretory vesicles for release into the extracellular space. Acetylcholine transport utilizes a proton gradient established by a vacuolar ATPase. This gene is located within the first intron of the choline acetyltransferase gene. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC202886



Western blot validation of overexpression lysate (Cat# [LY418926]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202886 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).