

Product datasheet for **RR204866**

Slc44a4 (NM_212541) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc44a4 (NM_212541) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc44a4
Synonyms:	Ng22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RR204866 representing NM_212541
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGGAAAAAGCAGAAGGAGAACGAGGCTTACGGGAATTCAGCCAAATACGACCCCTCCTTTCGAGGAC
 CCATCAAAAACAGGGGCTGCACAGACATCATCTGCTGTGTTCTCTTCTGGTCTTCATCTTGGGTTACAT
 CGTAGTGGGGCTTGTGGCCTGGGTGTACGGAGACCCTCGCAAGTGTCTTACCCAGAACTCCACAGGA
 GCCTACTGCGGCGTGGGCGACAACAAGGATAAACCCCTACGTCTGTACTTCAACATCTTAAGCTGTGCGG
 CGGCCATCAACGTCATCTCCATTGCTGAGAATGGCCTACAGTGCCCCACACCCAGGTGTGCGTCTCTTC
 CTGCCACAGACCCCGTGGGTTGTGGAGGGTTCCAGCTCTAAACACAGTCGGTGACGTTTATAAAGAA
 TACAGAACTTCTGTGTACCAGCGGTGTCCCAGATATGGTAGTGATGGACAGCCTGCAAAAGGGACTCT
 GTCCCAGTTTCTCTTCTTCTACTCCAGCTCTGGGACGTTGTTTTCCGCTCCCAACATCAACTTCAC
 ATTACCTGAACAGTTACAGATCAATAACACCACGTCTCTAAAGGAATCAGTGGCCTCCTGGACAGCATC
 AATGCCCGGGATGTCTGTGAAGATCTTTGAAGATTTTGCCACAGTCTGGTACTGGATTCTCGTGGCGC
 TGGGTGTGGCCCTGGTGCTAAGTCTGCTGTTTCCTGCTCTGCGCCTGGTGGCGGCCCCCTGGTGTCT
 GCTGCTGATTGTGGGGTGTGGCCGTGCTGGCCTATGGTATCTACCACTGCTGGCAACAGTACCGAGAG
 CTGCGGGACCAGGGTGTCTCCATCACCCAGCTAGGCTTCACTGCCAACCTCAGTGCCTACCAGAATGTGA
 AGGAGACATGGCTGGCTGCTCTGATTATCTGGCTGTCTGGAGGGCGTCTTGTGCTCATGCTCATTTT
 CCTGCGCCAGCGGATCCGGATTGCCATTGCTCTGCTGAAAGAAGCTAGCAGAGCTGTGGGACAGATGATG
 TCAACTATGTTCTATCTCTGGTCACTTCGCTCTCTGGTCAATTTGCATTGGTTACTGGCCGTGACAG
 CTCTGTACCTGGCTACATCCGGCAACCCAGTACGTCTATTGGGTGCATAACACCAGTACACCGGGCTG
 TGAGAAAAGTTCTGTGAACGTGTCTGTGACCCCATGGCCCATTTGAACCTCTCGTGCCAGAGCTCAAG
 TGCACCTTACAGGCTACTCGTCTCAGGCTTAGCCCAACGTTCTCTTCAACCTGCAAACTATGGAA
 TCCTGGGGCTCTTCTGGACTGTTAACTGGTACTGGCCCTGGGCCAGTGTGCTCTCGCTGGGGCCTTTGC
 CTCCTTCTACTGGGCTTTCACAAGCCTCGAGACATCCCTACTTCCCCTTGAGCTCAGCCTTCATCCGC
 ACACTCCGTTATCACACTGGCTCACTGGCGTTTGGAGCCCTCATCTGACCCTTGTGCAAAAGCCCGG
 TTATCCTGGAATACATTGACCACAAGCTAAGAGGATCCCAGAATCCTGTGGCCCGCTGCATCATCTGCTG
 CTTCAAGTGTGCTCTGGTGTCTGGAGAAGTTTATTAAGTTCCTCAACCGTAATGCCTACATCATGATC
 GCCATCTATGGGAAGAATTTCTGTGTCTCCGCCAAAACGCCTTCATGCTGCTCATGAGGAACGTTGTCA
 GGGTAGTCGTCTGGATAAAGTCACTGATTTACTGCTCTTCTTTGGGAAGCTGTGGTGGTGGGAGGTGT
 CGGTGTTCTGTCTTCTTCTTTTCTCCGGTCTGATCAAGGGACTGGGGAAGACTTTAAGAACCCCGAC
 CTCAACTATTACTGGCTGCCATCATGACCTCCATCATGGGAGCCTATGTATTGCCAGTGGCTTCTTCA
 GCGTTTTTGGAAATGTGTGTAGACACGCTTCTCTCTGCTTCTTGGAGACCTGGAGAGGAATGACGGTTC
 CCAAGAGCGGCCATACTACATGCCCAAGGCACTCTGAAGATTCTGGGCAAGAAGAATGAGGTACCTACG
 GGGGAAAAAACAGGAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR204866 representing NM_212541
 Red=Cloning site Green=Tags(s)

MGKKQKENEAYGNSAKYDPSFRGPIKNRGCTDIICCVLFLVFIILGYIVVGLVAWVYGDPRQVLYPRNSTG
 AYCQVGNKDKPYVLYFNILSCAAAINVISIAENGLQCPTPQVCVSSCPQTPVWVEGFQLSNTVGDVYKE
 YRNFVCPAVSPDMVVMDSLQKGLCPFLPSTPALGRCFPLPNINFTLPEQLQINNTTVSKGISGLLDSI
 NARDVSVKIFEDFAQSWYWILVALGVALVLSLLFILLRLVAAPLVLLLIVGVLAVLAYGIYHCWQQYRE
 LRDQGVSIITQLGFTANLSAYQNVKETWLAALIILAVLEGVLLLMLIFLRQRIRIAIALLKEASRAVGQMM
 STMFYPLVTFVLLVICIGYAVTALYLATSGQPQYVYVWHNTSTPGCEKVLVNVSCDPMAPLNSSPELK
 CTFTGYSSSGLAQRSLFNLQIYGILGLFWTVNWWLALGQCVLAGAFASFYWAFHKPRDIPTFPLSSAFIR
 TLRHYTGSLAFGALILTLVQIARVILEYIDHKLGRSQNPVARIICCFKCLWCLEKFIKFLNRNAYIMI
 AIYGKNFCVSAKNAFMLLRNVVVRVVLVDKVTDLLLFFGKLLVVGQVGLSFFFFSGRIKGLGKDFKNPD
 LNYWLPIMTSIMGAYVIASGFFSVFGMCDTLFLCFLEDLERNDGSQERPYYMPKALLKILGKKNEVPT
 GGKNRKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_212541

ORF Size: 2121 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_212541.1](#), [NP_997706.1](#)

RefSeq Size: 2254 bp

RefSeq ORF: 2124 bp

Locus ID: 294255

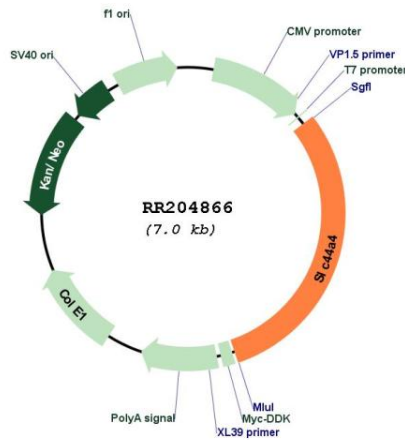
UniProt ID: [Q6MG71](#)

Cytogenetics: 20p12

MW: 78.7 kDa

Gene Summary: Choline transporter that plays a role in the choline-acetylcholine system and is required to the efferent innervation of hair cells in the olivocochlear bundle for the maintenance of physiological function of outer hair cells and the protection of hair cells from acoustic injury (By similarity). Also described as a thiamine pyrophosphate transporter in colon, may mediate the absorption of microbiota-generated thiamine pyrophosphate and contribute to host thiamine (vitamin B1) homeostasis (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR204866