

## Product datasheet for MR216943

### Slc14a1 (NM\_028122) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Slc14a1 (NM_028122) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc14a1
Synonyms:	2610507K20Rik; 3021401A05Rik; UT-B; Utb1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR216943 representing NM_028122 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGATAGTCCCACCATGGTTAAAGTAGACCGGGGTGAAAACCAGATTTTATCATGCCGCGGGAGAA  
GGTGTGGCTTCAAAGTACTTGGCTACGTACGGGTGACATGAAGGAATTCGCCAACTGGTGAAAGACAA  
ACCCGTGGTGTCCAGTTCATGGACTGGATACTTCGTGGCATATCCAGGTGGTGTGGTGCAGCAACCC  
ATCAGTGAATCCTGATCTGGTGGACTTCTGGTCCAGAACCCTGGTGGCTCTCTGTGGCTGTGTAG  
GAACTGTGGTCTCCACTCTGACAGCCCTCTTGCTTAGCCAAGACAGATCGGCGATAGCAGCGGGCTCCA  
AGGTTACAATGCCACCCTGGTAGGCATCCTCATGGCTGTCTTCTCAAACAAGGGCGACTATTTCTGGTGG  
CTGATATTCCTGTATCTGCTATGTCTATGACTTGCCCGTTTTCTCGAGCGCGTTGAGCTCCGTGCTCA  
GCAAGTGGGACCTGCCCGTCTTCACTCTCCCTTCAACATGGCGTTGTCGATGTACCTGTGAGCCACAGG  
ACACTACAATACGTTTTTCCCAAGTAACTCTTCAACCTGTGAGCTCCGTGCCCAACATCACGTGGTCT  
GAGCTCAGCGCCCTGGAGCTATTGAAGTCTTCCGGTGGGAGTCGGTCAGATATATGGCTGTGACAACC  
CGTGGACAGGCGGCATTTTCTATGTGCTATCCTGCTCTCTCCCACTCATGTGCTGCACGCTGCTAT  
TGGATCGTTGCTGGGTGTATCGCGGACTCAGTCTTGCAGCTCCATTTGAAGACATCTACTTTGGGCTC  
TGGGTTTTCAACAGCTCTCTGGCCTGCATTGCAATTGGAGGGATGTTTCATGGCACTCACCTGGCAGACCC  
ACCTCTGGCTCTTGCCTGTGCCCTGTTCACTGCCTACTTCGGAGCCTGTATGGCACACCTGATGGCTGT  
GGTTCACCTGCCAGCTTGTACCTGGTCTTCTGTTGGCCACACTACTCTTTCTTGTGACCACGAAA  
AATCCCAACATCTACAGGATGCCCTCAGCAAAGTTACCTACTCTGAGGAGAACCGCATCTTCTACCTCC  
AAAACAAGAAAAGGATGGTTGAAAGCCCCCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR216943 representing NM\_028122  
Red=Cloning site Green=Tags(s)

```
MEDSPTMVKVDRGENQILSCRGRRCGFKVLGYVTGDMKEFANWLKDKPVVLQFMDWILRGISQVVFVSNP
ISGILILVGLLVQNPWWALCGCVGTVVSTLTALLLSQDRSAIAAGLQGYNATLVGILMAVFSNKGDYFVW
LIFPVSAMSMTCPVFSSALSSVLSKWDLPVFTLPPFNMALSMYLSATGHYNTFFPSKLFPTVSSVPNITWS
ELSALELLKSLPVGVGQIYGCDNPWTGGIFLCAILLSSPLMCLHAAIGSLLGVIAGLSLAAPFEDIYFGL
WGFNSSLACIAIGGMFMALTWQTHLLALACALFTAYFGACMAHLMVAVHLPACTWSFCLATLLLLLLTTK
NPNIYRMPLSKVTYSEENRIFYLQNKKRMVESPL
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9028\\_e11.zip](https://cdn.origene.com/chromatograms/mm9028_e11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_028122

**ORF Size:** 1152 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\\_028122.4](#), [NP\\_082398.1](#)

**RefSeq Size:** 3675 bp

**RefSeq ORF:** 1155 bp

**Locus ID:** 108052

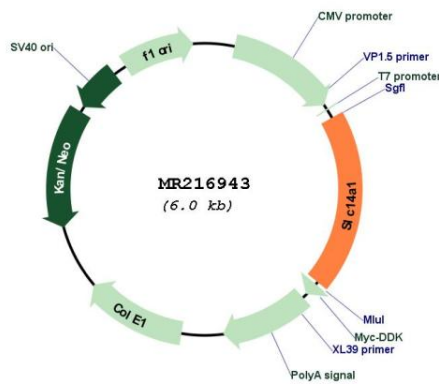
**UniProt ID:** [Q8VHL0](#)

**Cytogenetics:** 18 E3

**MW:** 42.6 kDa

**Gene Summary:** Urea channel that facilitates transmembrane urea transport down a concentration gradient. A constriction of the transmembrane channel functions as selectivity filter through which urea is expected to pass in dehydrated form. The rate of urea conduction is increased by hypotonic stress. Plays an important role in the kidney medulla collecting ducts, where it allows rapid equilibration between the lumen of the collecting ducts and the interstitium, and thereby prevents water loss driven by the high concentration of urea in the urine. Facilitates urea transport across erythrocyte membranes. May also play a role in transmembrane water transport, possibly by indirect means.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR216943