

## Product datasheet for **MR218377**

### **Slc14a1 (NM\_001171010) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Slc14a1 (NM_001171010) 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)



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**ORF Nucleotide Sequence:**

>MR218377 representing NM\_001171010  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAATGGACAATCTTTGACTGGTGGCACTGATGACGCCCATCACGGTCCTCTTTGGATAGACCCTTTCCG  
 GAAATAGAGGCGATAAAGGCAGCGCCAGAAGGCTTCAGACGTCTAAGCTTGGCCCTGGCACAAAGGTGGCG  
 AGAACAGGAGCCAGAGGAAGAGATAGCCATGGAAGATAGTCCACCATGGTTAAAGTAGACCGGGGTGAA  
 AACAGATTTTATCATGCCGCGGGAGAAGGTGTGGCTTCAAAGTACTTGGCTACGTCACGGGTGACATGA  
 AGGAATTCGCCAACTGGCTGAAAGACAAACCCGTGGTGTCCAGTTCATGGACTGGATACTTCGTGGCAT  
 ATCCCAGTGGTGTGTCAGCAACCCCATCAGTGAATCCTGATTCTGGTGGGACTTCTGGTCCAGAAC  
 CCCTGGTGGGCTCTCTGTGGCTGTGTAGAACTGTGGTCTCCACTCTGACAGCCCTTTGCTTAGCCAAG  
 ACAGATCGGCGATAGCAGCGGGCTCAAGGTTACAATGCCACCCTGGTAGGCATCCTCATGGCTGTCTT  
 CCAAACAAGGGCGACTATTTCTGGTGGCTGATATCCCTGTATCTGCTATGTCTATGACTTGCCGGTT  
 TTCTCGAGCGCGTTGAGCTCCGTGCTCAGCAAGTGGGACCTGCCCGTCTTCACTCTCCCTTTCAACATGG  
 CGTTGTCGATGTACCTGTGAGCCACAGGACACTACAATACGTTTTTCCCAAGTAAACTCTTCACACCTGT  
 CAGCTCCGTGCCAACATCACGTGGTCTGAGCTCAGCGCCCTGGAGCTATTGAAGTCTCTCCGGTGGGA  
 GTCGGTCAGATATATGGCTGTGACAACCCGTGGACAGGCGGCATTTTCTATGTGCTATCCTGCTCCT  
 CCCCACTCATGTGCTGCACGCTGCTATTGGATCGTTGCTGGGTGTCATCGCGGGACTCAGTCTTGACGC  
 TCCATTTGAAGACATCTACTTTGGGCTCTGGGTTTCAACAGCTCTCTGGCCTGCATTGCAATTGGAGGG  
 ATGTTTCATGGCACTCACCTGGCAGACCCACCTCCTGGCTCTTGCCTGTGCCCTGTTCACTGCCTACTTCG  
 GAGCCTGTATGGCACACCTGATGGCTGTGGTTCACCTGCCAGCTTGTACCTGGTCTCTGTTTGGCCAC  
 ACTACTTTTCTCTTGTGACCAGAAAAATCCCAACATCTACAGGATGCCCTCAGCAAAGTTACCTAC  
 TCTGAGGAGAACCGCATCTTCTACCTCCAAAACAGAAAAGGATGGTTGAAAGCCCCCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR218377 representing NM\_001171010  
 Red=Cloning site Green=Tags(s)

MNGQSL TGGTDDAHHGPLWIDPFGNRGDKAAPEGFRRLSLALAQRWREQEPEEEIAMEDSPTMVKVDRGE  
 NQILSCRGRRCGFKVLGYVTGDMKEFANWLKDKPVVLQFMDWILRGISQVVFVSNPISGILILVGLLVQN  
 PWWALCGCVGTVVSTLTALLLSQDRSAIAAGLQGYNATLVGILMAVFSNKGDFWWLIFPVVSAMSTCPV  
 FSSALSSVLSKWDLPVFTLFPNMALSMYLSATGHYNTFFPSKLFTPVSSVPNITWSELSALELLKSLPVG  
 VGQIYGCDNPWTGGIFLCAILLSSPLMCLHAAIGSLLGVIAGLSLAAPFEDIYFGLWGFNSLACIAIGG  
 MFMALTWQTHLLALACALFTAYFGACMAHLMVAVHLPACTWSFCLATLLFLLLTTKNPNIYRMPKSKVTY  
 SEENRIFYLQNKRMVESPL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9017\\_g03.zip](https://cdn.origene.com/chromatograms/mm9017_g03.zip)

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_001171010

ORF Size: 1320 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\\_001171010.1](#), [NP\\_001164481.1](#)

RefSeq Size: 3880 bp

RefSeq ORF: 1323 bp

Locus ID: 108052

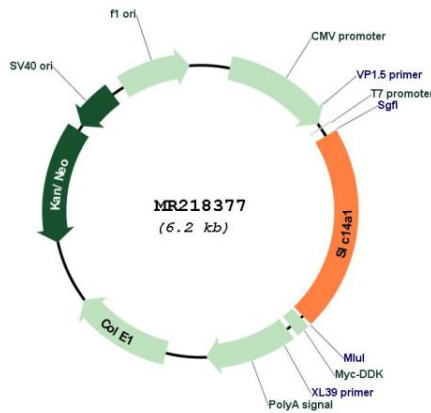
UniProt ID: [Q8VHL0](#)

Cytogenetics: 18 E3

MW: 48.8 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 MR218377