

## Product datasheet for **SC122292**

### **KCC4 (SLC12A7) (BC007760) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KCC4 (SLC12A7) (BC007760) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCC4
Synonyms:	DKFZp434F076; KCC4; potassium/chloride transporter KCC4; solute carrier family 12 (potassium/chloride transporters), member 7
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

>OriGene sequence for BC007760 edited  
 GGCACGAGGGCAGCGCGGGCCGGGCCGGGACGGGGACTGTCGGCTGCAGGCGGCCATGCC  
 CACCAACTTCACCGTGGTGCCCGTGGAGGCTCACGCCGACGGCGGGGACGAGACTGC  
 CGAGCGGACGGAGGCTCCGGGCACCCCCGAGGGCCCCGAGCCCGAGCGCCCCAGCCCGGG  
 AGATGGAATCCAAGAGAAAACAGCCATTCTCAACAATGTCGAGGTGGAACAAGAGAG  
 CTCTTTGAAGGGAAGAACATGGCACTTTTCGAGGAGGAGATGGACAGTAACCCCATGGT  
 GTCTCGCTGCTCAACAAGCTGGCCAACACACCAACCTGAGCCAGGGCGTGGTGGAGCA  
 CGAGGAGGACGAGGAGAGCCGGCGGGAGGCCAAGGCTCCGCGCATGGGCACCTTCAT  
 CGGCGTCTACCTGCCGTGCCGTGCAAGAATCCTGGGCGTCATCCTCTTCGCGCTGAC  
 GTGGATCGTGGGGTGGCTGGTGTCTGGAGTCCTTCCTCATCGTGGCCATGTGTGCAC  
 ATGTACAATGCTGACCGCCATTTCCATGAGTGGGATCGCTACCAACGGTGTGGTCCCAGC  
 TGGCGGGTCTACTACATGATATCGCGCTCGCTGGGACCCGAGTTTGGAGGCGTGTGG  
 CCTCTGCTTACCTGGGCACGACGTTTGCAGGGGCCATGTATTTTTGGGGACCATCGA  
 GATTTTTCTGACAGGCACGGAGGACGGCGTGGGACGCTGGGCCCTGGGCTTGGCCAGGG  
 AAACAGAGCGCAGACACCTGTCCCCAGTGATGCCGCCAAGCTGCCCATGGGGCTTC  
 CTACGGAAGTTTCTAGGCCCGTCACCTAGGGCTCTCTGTTCAGCCTTAACAGGCTCAGC  
 AAATCAGGGCGTGGCTGGACGATTTCTTGCATCTGAGGGCAGACGCTGTACCGGAGTG  
 ACCTGGACGTGGCCAGATCTTCTCGCAGGTCACAAGAAGCCAGTGAGCCCTTGCCTTGGT  
 TTCTGGAAGTTCTTTTCTTGGCTGGATTTACCCAGTGGTTAGGTTGCATTTCTACCCCA  
 TCCAGAACATTCTTGAAGAGCACCCGGAGCTGAAGCTGTCCCTGATGATGAAGGTGAAA  
 CGTCAGCCCTGGCCATGGCTCCGCTCAGGGCCCCGGTACCTCCGAGTCACTCTGTTCT  
 TGACTGCTTTGTGTTTCTGTACCTCAAGGCACTGAAGCTGGAGGACTCTGTCCATGCC  
 GTGTCACCTCGTGTGGGAGCCTCTGGGCTCGGCAGGTCCACATTTTCATGAGTGAAGCG  
 TGGGCCAGGGCCATCTGGAAGGGAACCTCGGCTTTTCCAGAACGTGGTGGATCATCTGTC  
 GGGTGTGTGGTGAACACGTTTCAAGTTCATCAGGGCCTACGCTCCGGGAAGGGGCCCCAGC  
 TGTGGCTCTGCCATGCCGGGCTGTGTTTGCAGCTGTCCGAGTCTCCATCCGCCTTTAGAA  
 AACAGCCACTTCTTTTATAAGCACTGACAGGGCCAGCCACAGCCACAGGTGCGATC  
 AGTGCCTCACGCAGGCAATGCACTGAAACCCAGGGGCACACGCGCAGAGTGAACAGT  
 GAGTTCACCCGACAGCCACGACAGCCAGGACTGCCCTCCCCACCCACCCACCCACCCAGG  
 AGCACGGCACACAGTTCAGCCTCTGAGCTGGCTCACACGTGCCATCCCCACCCCGGTGCT  
 CCAGGGAAGGAGGACACGGACCCGACGTGGGAGTCTCAGGCAGCAGTGGCGCCTGGTG  
 TCAGGTCTGTCTGGCTGAGTCCCGGGCGTCCCCTGCCATGGCCTGTGCCTTGCATGGAGG  
 CGGCGGTGGCACTGAAGAGATAGCTTTCAAGGGCCCAACACTTTGCACTTCGGCTGGCTG  
 TGAGTTTCTGCTTTGTAGGTTGTGGTCACATTTGCAGGCTGCGGGCAGTGGCACCAGCTT  
 GGGCTCCCTTTCTATGTGGCATATTTATTTAATTAACACCCAGGGAGTTACGTGGTA  
 ACAAGGTTGTCCATAAAGAGGTTGCTTCTATACTAGAGGCCCCAGATGGCCAGGCCTT  
 GGGCTACGTCTGGCTTGCATGGTCTCCCAAGGGAATCAGCCCCATCAACAAGTTCAAAT  
 CGGGGCAGAGGCTGCACTTGTGCCCCAGATGTTTCTGAGGAGCCAGACTAGGGCTGGCA  
 TTGCTGTAGAGTGACGGCTGCTGCCAGAGCGTGTCCAGACATCACAGCGGGGCTCAGC  
 AGTTCACAGCCTCTGCCTGCCTGGCTAAGCATGAGTTAAGCAGCAAAACGCTCCTCC  
 ATGTCTGGATGGGGCCGGCAGGTCCTGTGTCCCCTGCACCTGGAGGAGAGCAGGCTAGAG  
 GCACAGCGCCACATGGTGTGGCTCTGAACGTTGGTTGGTGGCTGAAAAACAGCCCTGC  
 TTCTGAGGGCCGCTCAGTTCTGCACACGAAACCCTCCTGAGGGCTCAGCTCTGCCCC  
 GCCCTGGGCTGCAGCCTCTGCACGCAAGCACCAGGCATCCTTTGTGTTGCAACTCCGTG  
 TAACCAGTAACTACAGCCATTTACAATTGACTCCGTTTCTTTTGTAGGTTTCCCTGTCT  
 GTCTGTGTTAGTAGAAAAATAAAATCCTATGAAATCTGAAAAAAAAAAAAAAAAAAAAA  
 A

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for BC007760 unedited NNAAGTACAAAATTTGTATACGACTCATATAGGGCGGCCGCAATTCGCACGAGGGCAGC GCGGGCCGGGCGGGACGGGACTGTGGCTGCAGGCGGCCATGCCACCAACTTCACCG TGGTGCCCGTGGAGGCTCACGCCGACGGCGGGGACGAGACTGCCGAGCGGACGGAGG CTCGGGACACCCCGAGGGCCCCGAGCCGAGCGCCCCAGCCGGGAGATGGAATCCAA GAGAAAACAGCCATTCTCAACAATGTCGAGGTGGAACAAGAGAGCTTCTTTGAAGGGA AGAACATGGCACTTTTCGAGGAGGAGATGGACAGTAACCCCATGGTGTCTCGCTGCTCA ACAAGCTGGCCAACCTACCCAACCTGAGCCAGGGCGTGGTGGAGCACGAGGAGGACGAGG AGAGCCGGCGGGGAGGCCAAGGCTCCGCGCATGGGCACCTTCATCGGCGTCTACTGTC CGTGCCTGCAGAACATCCTGGGCGTCATCCTCTTCTGCGCTGACGTGGATCGTGGGGG TGGCTGGTGTCTGGAGTCTTCTCATCGTGGCCATGTGCTGCACATGTACAATGCTGA CCGCCATTTCCATGAGTGCATCGCTACCAACGGTGTGGTCCCAGCTGGCGGGTCTACT ACATGATATCGCGCTCGCTGGGACCCGAGTTTGGAGGCGCTGTCGGCCTTGCTTCTACC TGGGCACGACGTTTGCAGGGCCATGTATATTTTGGGGACCATCGAGATTTTTCTGACAG GCACNGAGACGGCGTGGGCAGCCTGGGCTGGGCTGGCCAGGGAACAGACGCAGAACA CCTGTCCCCATGATGCCCCAAGCTGCCCTGGGCTCCTACGGAGTTTCTAGC
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	BC007760
<b>Insert Size:</b>	2701 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">BC007760.1</a> , <a href="#">AAH07760.1</a>
<b>RefSeq Size:</b>	2701 bp
<b>RefSeq ORF:</b>	801 bp
<b>Locus ID:</b>	10723
<b>Cytogenetics:</b>	5p15.33
<b>Protein Families:</b>	Transmembrane

**Gene Summary:**

Mediates electroneutral potassium-chloride cotransport when activated by cell swelling. May mediate K(+) uptake into Deiters' cells in the cochlea and contribute to K(+) recycling in the inner ear. Important for the survival of cochlear outer and inner hair cells and the maintenance of the organ of Corti. May be required for basolateral Cl(-) extrusion in the kidney and contribute to renal acidification (By similarity).[UniProtKB/Swiss-Prot Function]