

Product datasheet for **SC100001**

Chloride Channel 5 (CLCN5) (NM_000084) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Chloride Channel 5 (CLCN5) (NM_000084) Human Untagged Clone
Tag:	Tag Free
Symbol:	Chloride Channel 5
Synonyms:	CIC-5; CLC5; CLCK2; DENT1; DENTS; hCIC-K2; NPHL1; NPHL2; XLRH; XRN
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_000084 edited
GGGCGGCCGCAATTCGGCACGAGGGGCACGAGGAAGACCTGATGGACATTCCAGCAACC
GCTATGGATTTCTCCATGAGAGATGATGTTCTCCCTTAGACCGAGAAGTAGGAGAGGAC
AAGTCGTACAATGGTGGAGGAATAGGTTCTTCAAATAGGATCATGGACTTCTTGGAGGAG
CCAATCCCTGGTGTAGGGACCTATGATGATTTCAAACAATTGATTGGGTGAGAGAGAAG
TCTCGAGACCGGGATAGGCACCGAGAGATTACCAATAAAAAGCAAAGAGTCAACATGGGCC
TTAATTCACAGTGTGAGTGTGCTTTTTCCGGCTGGTTGTTGATGCTCCTTATTGGGCTT
TTATCAGGTTTCGTTAGCTGGTTTGATAGACATCTCTGCTCATTGGATGACAGACTTAAAA
GAAGGTATATGCACAGGGGGATTCTGGTTAAACCATGAACATTGTTGCTGGAACCTGAG
CATGTCACCTTTGAAGAGAGAGACAAAATGTCCAGAGTGAATAGTTGGTCCCAGCTTATC
ATCAGCACAGATGAGGGAGCCTTTGCCTACATAGTCAATTATTTTCATGTACGTCCTCTGG
GCTCTCCTATTTGCCTTCTTGGCGTATCTCTTGTCAAGGTGTTTGCCTTATGCCTGT
GGCTCTGGAATCCCTGAGATAAAAACTATCTTGAGTGGTTTCATTATTAGGGGCTATTTG
GGTAAGTGGACTCTGGTTATCAAAACCATCACCTTGGTGTGGCAGTGTCTGTGGCTTG
AGCCTGGGCAAAGAGGGCCCTCTAGTGCACGTGGCTTGTCTGTGGGAACATCCTGTGC
CACTGCTTCAACAAATACAGGAAGAATGAAGCCAAGCGCAGAGAGGTCTGTCTGGCTGCA
GCAGCAGCTGGTGTATCTGTAGCCTTTGGAGCACCTATAGGTGGAGTATTATTCAGCCTT
GAAGAGGTCAGCTACTATTTCCCTCAAAACATTGTGGCGTTTATTCTTTGCTGCCTTG
GTGGCAGCATTCACTCTACGCTCCATCAATCCATTTGGGAACAGCCCGCTGGTACTATTT
TATGTGGAGTTTACACCCCATGGCATCTCTTGTAGCTCGTGCCATTCACTCTGTGGGC
ATATTTGGTGGTCTGTGGGGAGCACTGTTTATCCGCACAAACATTGCCTGGTGTCCGGAAG
CGAAAGACCACCCAGTTGGCAAGTATCCTGTTATAGAGGTAAGTCTGTGACAGCCATC
ACTGCCATCCTGGCTTTCCCAATGAATACACTCGGATGAGCACAAGTGAAGTCAATTTCT
GAGCTGTTAATGACTGTGGCCTTCTGGACTCCTCCAAGCTCTGTGATTATGAGAACCCT
TTCAACACAAGCAAAGGGGGTGAAGTGCCTGACAGACCGCTGGCGTGGGAGTCTACAGT
GCAATGTGGCAGCTGGCTTAACTACTACTGAAAATTGTCATTACTATATTCACCTTT
GGCATGAAGATCCCTTCTGGCCTTTTATCCCTAGCATGGCTGTTGGTGTATAGCAGGT
CGACTTCTAGGAGTAGGAATGGAACAGCTGGCTTATTACCACCAGGAATGGACCGTCTTC
AATAGCTGGTGTAGTCAGGGAGCTGATTGCATCACCCCGGCCTTATGCAATGGTTGGG
GCTGCAGCCTGCTTAGGTGGGGTACTCGGATGACTGTTTCTCTTGTGTCATAATGTTT
GAACTGACTGGTGGCTTGAATACATCGTCCCTCTGATGGCTGCAGCCATGACAAGCAAG
TGGGTGGCAGATGCTCTTGGGCGGGAGGCATCTATGATGCCACATCCGTCTCAATGGA
TACCCCTTTCTTGAAGCAAAGAAGAGTTTGTCTATAAGACCCTGGCAATGGATGTGATG
AAACCCCGGAGAAATGATCCTTTGTTGACTGTCCTTACTCAGGACAGTATGACTGTGGAA
GATGTAGAGACCAATAATCAGTGAACCCTTACAGTGGCTTCCAGTGGTGGTATCCCGG
GAGTCCCAAAGACTTGTGGGCTTTGCTCCGAAGAGATCTATTATTTCAATTGAAAAT
GCTCGAAAGAAACAGGATGGGGTGTAGCACTCCATCATTTATTTACGGAGCATTCT
CCTCCATTGCCACCATACTCCACCCACTCTAAAGCTTCGGAACATCCTCGATCTCAGC
CCCTTCACTGTGACTGACCTTACACCCATGGAGATCGTAGTGGATATTTCCGAAAGCTG
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GATGTGTTAAAGCATATAGCACAGATGGCGAACCAAGATCCTGATTCCATTCTCTTCAAC
TAGAATCATAGAGTTCTGGATGTAAGCGGGAAGGACATTACAGACCATGGATATGTTGT
ATTAAGTGGTACCCAAAACACATTTTCCATATTTGGATGGTGAAGTCACATTAGTGTGT
TGTCTCTTCTACAAGTTAACCAGTTGCACTACATAATCTCTGGAAATTAATTTTCTCT
TTAGGAGAAATTATAGTTAGGCTTCCATGATGTTACATTAGGAAGATATCATGAAAGAAT
AAATAAGATTGCTATGGTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000084 unedited
 TTGTAATACGACTCACTATAGGGCGGCCGCAATTCGGCACGAGGGGCACGAGGAAGACC
 TGATGGACATCCAGCAACCGCTATGGATTTCTCCATGAGAGATGATGTTCCCTCCCTTAG
 ACCGAGAAGTAGGAGAGGACAAGTCGTACAATGGTGGAGGAATAGGTTCTTCAAATAGGA
 TCATGGACTTCTTGGAGGAGCCAATCCCTGGTGTAGGGACCTATGATGATTTCAATACAA
 TTGATTTGGGTGAGAGAGAAGTCTCGAGACCGGGATAGGCACCGAGAGATTACCAATAAAA
 GCAAAGAGTCAACATGGGCCTTAATTCACAGTGTGAGTATGCTTTTTCCGGCTGGTTGT
 TGATGCTCCTTATTGGGCTTTTATCAGGTTTCGTTAGCTGGTTTGATAGACATCTCTGCTC
 ATTGGATGACAGACTTAAAGAAGGTATATGCACAGGGGATTCTGGTTTAAACATGAAC
 ATTGTTGCTGGAACCTCTGAGCATGTCACCTTTGAAGAGAGAGACAAATGCCAGAGTGGAA
 ATAGTTGGTCCCAGCTTATCATCAGCACAGATGAGGGAGCCTTTGCCACATAGTCAATT
 ATTTTCATGTACGTCCTCTGGGCTCTCTATTTGCCTTCTTGGCGTATCTCTTGCAAGG
 TGTTTGCCTTATGCCTGTGGCTCTGGAATCCCTGAGAAAAAATCTGAGTGGTTTAA
 TTATTAGNGCTTTTGGTAAGTGGACTCTGGTATCAAACCATCACCTGGGTGCTGCAGT
 GTCGTCTGGCTTGAGCCTGGCAAAGAGGGCCTCTANTGCACGTGGCTTGCTGCTGTGGGA
 ACATNCTGTGCCACTGCTTCAACATACAGGAGGATGAAGCAA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000084 unedited
 GCCCGGGCCGCAATCTAGAGTCGAGTNTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAAACCATAACAATCTTATTTATTTTTTCA
 TGAAATCTTCTAAGGGAACATCTTGGAACCTAACTTTAATTTTTCTAAAAAATAAAT
 TAATTTCCAAAAATTTGTAGGGCAACGGGTTAACTTGGTGGGAAAAGAGAAACACCCT
 AATGTGACTTCCCATCCAAATTTGGAAAAATGTGTTTTGGGTACCCAGTTAATACAACAT
 ATCCCTGGTCTGTAATGGCCTTCCCGTTTACATCCAGAATTTTTGATTCTAGTTGAAAA
 AAATGGAATCAGGATCTTTGGTCCGCCATCTGGGCTAATAGGCTTAAACACATCCTTTTT
 GATAATGATTCACCAATTTCCCGTTGTGTTGTACCCAGCCCCTGCCGGAATCCAGTT
 TTTGAAAAATTTCCCTCCAATCCCATGGGGTAAGGCCACCCCGGGGAAGGGGGC
 TGAAATCGAGGATGTTCCACAAACCTTTAAAAGGGTGGGATTGTTGGGGCAATGAAGG
 AAATCCCCCTAAAAAATGATGGAAGGCTACCACCCCTCTGGTTTTTTCTGCCTTTTT
 AATTGAAATAAGGAATCTTTTGGGGGAAAAACCCAAATTTTTGGGAATCCGGGGATA
 CCCCCCTTGAAACCCCGAGAGGGTNTCCCGATTATGGTTTTAATTTTCCAAATTT
 TCTGTCTTGAAAGGAAACCCAAAGGATTTTTTCCGGTTTATCACCTTCTTGCCCGG
 GTTTTAAAAAATTTTTTTGTTTAAAAAGGGTTTCTTGAACGGTGGGGCTATTAAT
 CCCCCCCCCAAAATTTCCCCCTTTTTTTTTGGGTTGGCCTATAGGCCCTTTTTTTTAA
 CCCCCTGTTTAAATTTTAAACAAAAAATTTTTGTTCCCCCTTAAAGGGGGCCACATTT
 TAG

Restriction Sites:

NotI-NotI

ACCN:

NM_000084

Insert Size:

2241 bp

OTI Disclaimer:

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).

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_000084.1](#), [NP_000075.1](#)

RefSeq Size: 3173 bp

RefSeq ORF: 2241 bp

Locus ID: 1184

UniProt ID: [P51795](#)

Cytogenetics: Xp11.23

Domains: CBS, voltage_CLC

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Gene Summary: This gene encodes a member of the CIC family of chloride ion channels and ion transporters. The encoded protein is primarily localized to endosomal membranes and may function to facilitate albumin uptake by the renal proximal tubule. Mutations in this gene have been found in Dent disease and renal tubular disorders complicated by nephrolithiasis. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jan 2013]

Transcript Variant: This variant (3, also known as type 3) lacks several 5' exons but has an alternate 5' exon, and it thus differs in the 5' UTR and uses a downstream start codon, compared to variant 1. The resulting isoform (b) has a shorter N-terminus, compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.