

Product datasheet for RC226300

SLC12A3 (NM_001126108) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLC12A3 (NM_001126108) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: SLC12A3
Synonyms: NCC; NCCT; TSC
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC226300 representing NM_001126108
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAGAAGTGGCCACAACAGAGACGCCTGGGGACGCCACTTTGTGCAGCGGGCGCTTCACCATCAGCA
 CACTGCTGAGCAGTGATGAGCCCTCTCCACCAGCTGCCTATGACAGCAGCCACCCAGCCACCTGACCCA
 CAGCAGCACCTTCTGCATGCGCACCTTTGGCTACAACACGATCGATGTGGTGCCACATATGAGCACTAT
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 AGCAGGAAGGCAGACACCTGCATGCCCTGGCCTTTGACAGCCGGCCAGCCACGAGATGACTGATGGCT
 GGTGGAGGGCGAGGCAGGCACCAGCAGCGAGAAGAACCCGAGGAGCCAGTGCAGCTTCGGCTGGGTCAAG
 GGGGTGATGATTCGTTGCATGCTCAACATTTGGGGCGTGATCCTCTACCTGCGGCTGCCCTGGATTACGG
 CCCAGGCAGGCATCGTCTGACCTGGATCATCATCCTGCTGTCCGGTACGGTGACCTCCATCACAGGCCT
 CTCCATCTCAGCCATCTCCACCAATGGCAAGTCAAGTCAAGTGGCACCTACTTCTCATCTCCCGGAGT
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 ACACGGTGGCTTTGCAGAGACCGTGGGGACCTGCTCCAGGAGTATGGGGCACCCATCGTGACCCCAT
 TAACGACATCCGCATCATTTGGCGTGGTCTCGGTCACTGTGCTGCTGGCCATCTCCCTGGCTGGCATGGAG
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 CGCTGATCCCCCATCTGAGGACAAGGCCTCCAAAGGCTTCTTACAGTACCGGGCGGACATTTTTGTCCA
 GAACCTGGTGCCTGACTGGCGGGTCCAGATGGCACCTTCTTCGGAATGTTCTCCATCTTCTCCCTCG
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 GGACCCTCATGGCATTCTTGGACGACATTTCTACCTGGCCATCTCAGCCACCATTTGGCTCCTGCGT
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 TCACCTGGTGGGCGGCCCTCATCGCCATTGGCGTGGTGCCTTCTCTCTGCTCTATGTCTCTACAAGAA
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 CTCAATGAGGTGGAAGACCACATCAAGAATACCGCCCCAGTGCCTGGTGTCTACGGGGCCCCCAACT
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 AACAAAGAGGAAGATCAAGGCCTTCTACTCGGATGTCATTGCCGAGGACCTCCGCAGAGGCGTCCAGATCC
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 GGCCACCACCATTTCCAGTCGGAGCAGGGCAAGAAGACCATAGACATCTACTGGCTCTTTGACGATGGA
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 TTTGAGGACATGATTGCACCCCTCCGTCTGAATGATGGCTTCAAGGATGAGGCCACTGTCAACGAGATGC
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 GAGGCTGAATGAGATTGTGCTGGATTACTCCCAGACGCTGCTCTCATCGTCATCACTTTGCCCATAGGG
 AGGAAGGGGAAGTGGCCAGCTCGCTGTACATGGCCTGGCTGGAGACCTGTCCCAGGACCTCAGACCTC
 CAGTCATCCTGATCCGAGGAAACCAGGAAAACGTGCTCACCTTTACTGCCAG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGTTTAA

Protein Sequence:

>RC226300 representing NM_001126108
 Red=Cloning site Green=Tags(s)

MAELPTTETPGDATLCSGRFTISTLLSSDEPSPAAAYDSSHPHSLTHSSTFCMRTFGYNTIDVVPTYEHY
 ANSTQPGEPKVRPTLADLHSFLKQEGRHLHALAFDSRPSHEMTDGLVEGEAGTSSEKNPEEPVRFGWVK
 GVMIRCMNLNIWGVILYLRLPWITAQAGIVLTWIIILLSVTVTSITGLSISAISTNGKVKSGTYFLISRS
 LGPELGGSIGLIFAFANAVGVAMHTVGF AETVRDLLQEYGAIVDPINDIRIIGVSVTVLLAISLAGME
 WESKAQVLFLLVIMVSFANYLVGTLIPPEDEKASKGFFSYRADIFVQNLVPDWRGPDGTFFGMFSIFFPS
 ATGILAGANISGDLKDPAAIIPKGTLM AIFWTTISYLAISATIGSCVVRDASGVLNDTVTPGWGACEGLA
 CSYGWNFTECTQQHSCHYGLINYYQTMVMVSGFAPLITAGIFGATLSSALACLVSAKVQCLCEDQLYP
 LIGFFGKGYGKNKEPVRGYLLAYAI AVAFIIIAELNTIAPIISNFFLCSYALINFSCFHASITNSPGWRP
 SFQYYNKWAALFGAII SVVIMFLLTWWAALIAIGVVLFLLLYVIYKKEPVNWGSSVQAGSYNLALSYSVG
 LNEVEDHIKNYRQQLVLTGPPNFRPALVDFVGTFRNLSLMICGHVLI GPHKQRMPELQLIANGHTKWL
 NKRKIKAFYSDVIAEDLRRGVQILMQAAGLGRMKPNILVVGFKKNWQSAHPATVEDYIGILHDAFDNFNYG
 VCMRMREGLNVSKMMQAHINPVFDPAEDGKEASARVDPKALVKEEQATTIFQSEQGKKTIDIYWLFDDG
 GLTLLIPYLLGRKRRWSKCKIRVFGGQINRMDQERKAIISLLSKFRLGFHEVHILPDINQNPRAEHTKR
 FEDMIAPFRLNDGFKDEATVNEMRRDCPWKISDEEITKNRVKSLRQVRLNEIVLDYSRDAALIVITLPIG
 RKGKCPSSLYMAWLETLSQDLRPPVILIRGNQENVLTFYCQ

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

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:	<ol style="list-style-type: none">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:	<u>NM_001126108.1</u> , <u>NP_001119580.1</u>
RefSeq ORF:	3066 bp
Locus ID:	6559
UniProt ID:	<u>P55017</u>
Cytogenetics:	16q13
Protein Families:	Druggable Genome, Transmembrane
MW:	112.9 kDa
Gene Summary:	This gene encodes a renal thiazide-sensitive sodium-chloride cotransporter that is important for electrolyte homeostasis. This cotransporter mediates sodium and chloride reabsorption in the distal convoluted tubule. Mutations in this gene cause Gitelman syndrome, a disease similar to Bartter's syndrome, that is characterized by hypokalemic alkalosis combined with hypomagnesemia, low urinary calcium, and increased renin activity associated with normal blood pressure. This cotransporter is the target for thiazide diuretics that are used for treating high blood pressure. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]