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Product datasheet for RC226304

SLC12A3 (NM_001126107) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC12A3 (NM_001126107) 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:	>RC226304 representing NM_001126107 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCAGAACTGCCCACAACAGAGACGCCTGGGGACGCCACTTTGTGCAGCGGGCGCTTCACCATCAGCA CACTGCTGAGCAGTGATGAGCCCTCTCCACCAGCTGCCTATGACAGCAGCCACCCCAGCCACCTGACCCA CAGCAGCACCTTCTGCATGCGCACCTTTGGCTACAACACGATCGATGTGGTGCCCACATATGAGCACTAT GCCAACAGCACCCAGCCTGGTGAGCCCCGGAAGGTCCGGCCCACACTGGCTGACCTGCACTCCTTCCTCA AGGAAGGCAGACACCTGCATGCCCTGGCCTTTGACAGCCGGCCCAGCCACGAGATGACTGATGGGCTGGT GGAGGGCGAGGCAGGCACCAGCAGCGAGAAGAACCCCGAGGAGCCAGTGCGCTTCGGCTGGGTCAAGGGG GTGATGATTCGTTGCATGCTCAACATTTGGGGCGTGATCCTCTACCTGCGGCTGCCCTGGATTACGGCCC AGGCAGGCATCGTCCTGACCTGGATCATCATCCTGCTGTCGGTCACGGTGACCTCCATCACAGGCCTCTC CATCTCAGCCATCTCCACCAATGGCAAGGTCAAGTCAGGTGGCACCTACTTCCTCATCTCCCGGAGTCTG GGCCCAGAGCTTGGGGGCTCCATCGGCCTCATTTTCGCTTTCGCCAATGCCGTGGGTGTGGCCATGCACA CGGTGGGCTTTGCAGAGACCGTGCGGGACCTGCTCCAGGAGTATGGGGCACCCATCGTGGACCCCATTAA CGACATCCGCATCATTGGCGTGGTCTCGGTCACTGTGCTGCTGGCCATCTCCCTGGCTGGCATGGAGTGG GAGTCCAAGGCCCAGGTGCTGTTCTTCCTTGTCATCATGGTCTCCTTTGCCAACTATTTAGTGGGGACGC TGATCCCCCCATCTGAGGACAAGGCCTCCAAAGGCTTCTTCAGCTACCGGGCGGACATTTTTGTCCAGAA CTTGGTGCCTGACTGGCGGGGTCCAGATGGCACCTTCTTCGGAATGTTCTCCATCTTCTTCCCCTCGGCC ACAGGCATCCTGGCAGGGGCCAACATATCTGGTGACCTCAAGGACCCTGCTATAGCCATCCCCAAGGGGA CCCTCATGGCCATTTTCTGGACGACCATTTCCTACCTGGCCATCTCAGCCACCATTGGCTCCTGCGTGGT GCGTGATGCCTCTGGGGTCCTGAATGACACAGTGACCCCTGGCTGGGGTGCCTGCGAGGGGCTGGCCTGC AGCTATGGCTGGAACTTCACCGAGTGCACCCAGCAGCACAGCTGCCACTACGGCCTCATCAACTATTACC AGACCATGAGCATGGTGTCAGGCTTCGCGCCCCTGATCACGGCTGGCATCTTCGGGGCCACCCTCTCCTC TGCCCTGGCCTGCCTTGTCTCTGCTGCCAAAGTCTTCCAGTGCCTTTGCGAGGACCAGCTGTACCCACTG ATCGGCTTCTTCGGCAAAGGCTATGGCAAGAACAAGGAGCCCGTGCGTGGCTACCTGCTGGCCTACGCCA

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Protein Sequence:

>RC226304 representing NM_001126107
Red=Cloning site Green=Tags(s)

MAELPTTETPGDATLCSGRFTISTLLSSDEPSPPAAYDSSHPSHLTHSSTFCMRTFGYNTIDVVPTYEHY
ANSTQPGEPRKVRPTLADLHSFLKEGRHLHALAFDSRPSHEMTDGLVEGEAGTSSEKNPEEPVRFGWVKG
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IGFFGKGYGKNKEPVRGYLLAYAIAVAFIIIAELNTIAPIISNFFLCSYALINFSCFHASITNSPGWRPS
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CVMRMREGLNVSKMMQAHINPVFDPAEDGKEASARGARPSVSGALDPKALVKEEQATTIFQSEQGKKTID
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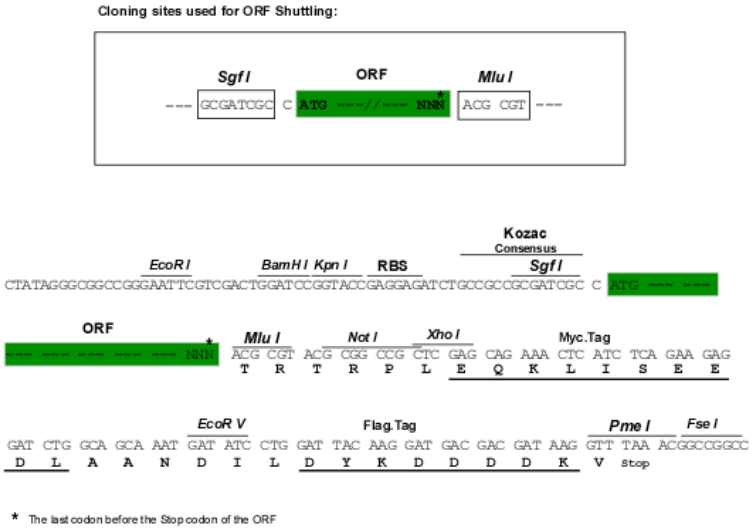
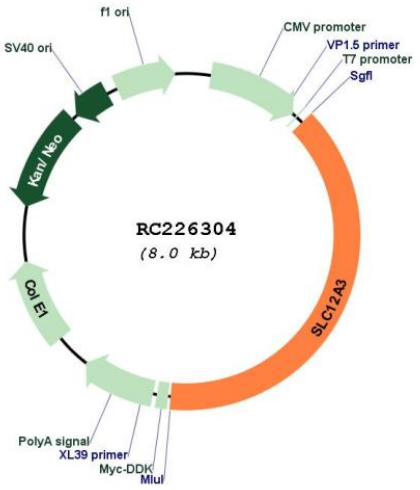
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001126107

ORF Size: 3087 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_001126107.1, NP_001119579.1
RefSeq ORF:	3090 bp
Locus ID:	6559
UniProt ID:	P55017
Cytogenetics:	16q13
Protein Families:	Druggable Genome, Transmembrane
MW:	113.6 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]