

Product datasheet for **RG230648**

SLC12A1 (NM_001184832) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC12A1 (NM_001184832) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC12A1
Synonyms:	BSC1; NKCC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230648 representing NM_001184832 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGATCGC**C

ATGTCAGTGAACAACTCTTCCAATGTATTTCTGGATTCACTGCCCAGTAATACCAATCGCTTTCAAGTTA
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GGGTTTCGGCCCCCTCATCACTGCGGGAATCTTTCTGCAACACTCTCCTCCGCCCTGGCCTCCCTTGTCAGCGACCCAAAGTGTTCAGGCTCTGTGCAAGGACAACATCTACAAAGCCCTGCAGTTTTTTGCAAAGGATATGGGAAAAACAATGAACCCCTGAGAGGATATATTCTCACTTTTCTTAGCCATGGCATTATTCTTATTGCGGAACTGAACACCATTGCTCCCATCATCTCCAACCTTTTCTGGCCTCATATGCATTATTAATTCTCCTGCTTCCATGCCTCTTATGCCAATCTCCAGGATGGAGACCTGCGTATGGAATTTACAACATGTGGTATCTCTTTTGGAGCTGTTTTGTGCTGTGCAGTCATGTTTGCATCAACTGGTGGGCAGCTGTCATCACCTATGTCATTGAATTCTTCTTTACGTCTATGTGACTTGTGAAGAAGCCAGATGGAACCTGGGGCTCCTCCACACAGGCTCTTTCTACGTGAGTGCTTTAGACAATGCTCTGGAATTAACCACAGTGGGAAGACCACGTAAAAAAGTTCAGGCCCCAGTGCATTGTCTTAACAGGGGGACCCATGACAAGACCTGCTCTCCTGGACATACTCACGCCTTTACCAAGAACAGTGGCCTTTGCATCTGCTGTGAAGTCTTTGTGGGACCGCGCAAACGTGTGTTAAGGAGATGAACAGTGGCATGGCGAAAAAAGAGGCTGGCTTATAAAGAACAAAATCAAGGCTTTTATGCTGCAGTGGCGGAGACTGTTTCAAGGATGGTGTCCGAAGTCTTCTTCAAGCCTCAGGCTTAGGAAGAATGAAACCAAACTCTGGTATTGGATATAAGAAAACTGGAGGAAAGCTCCCTTGACAGAGATTGAGAAGTACGTGGGAATCATACATGATGCATTTGATTTTGGAGATTGGCGTGGTTATAGTCAGAATCAGCCAAGGATTTGACATCTCTCAGGTTCTTCAAGTGCAAGAGGAATTAGAGAGATTAGAAGAGGAGAGACTAGCATTTGGAAGCGACTATCAAAGATAATGAGTGTGAAGAGGAAAGTGGAGGCATCCGAGCTTGTTTAAAAAAGCTGGCAAGTTGAACATTACTAAGACAACGCCTAAAAAAGATGGCAGCATTAAACACAAGCCAGTCGATGCATGTGGGAGAGTTCAACCAGAACTGGTGGGAAGCCAGCACTCAATTTAAAAAGAAACAAGAAAAAGGCACAAATTGATGTTTGGTGGTGTGTTGATGATGGAGGGTTAACTTCTTATCCCTATATCTTAACTCTCAGAAAATGGAAGACTGTAATTAAGAATCTATGTGGGAGGGAAGATCAACCGCATTGAAGAAGAAAAATGTGAATGGCTTCCCTTCTGAGCAAAATTTAGGATAAAATTTGCAGACATCCATATCATCGGTGACATCAACATTAGGCCAAACAAGAGAGCTGGAAAGTCTTTGAAGAGATGATTGAACCATATCGTCTCCATGAAAGCTGCAAGATTTAACTGCTGAGAAATTTAAAAAGAGAACTCCGTGGAAAATTACAGATGCAGAACTGGAGCAGTCAAGGAAAAGAGTTACCGCCAAGTTCGACTGAATGAACCTTTACAGGAGCACTCCAGAGCTGCTAATCTCATTGTCCTGAGCCTTCCCGTGGCAAGAAAGGGATCCATATCGGATTTGTTGTATATGGCTTGGTTGGAAATCCTCACAAAGAACCTCCACCTGTCTTACTAGTTAGAGGAAATCAAAAAATGTCTTGACATTTACTCT

ACGCGTACGCGGCGCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG230648 representing NM_001184832

Red=Cloning site Green=Tags(s)

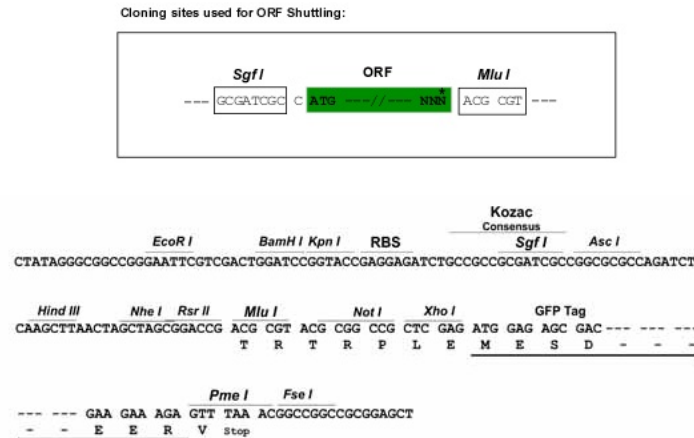
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TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

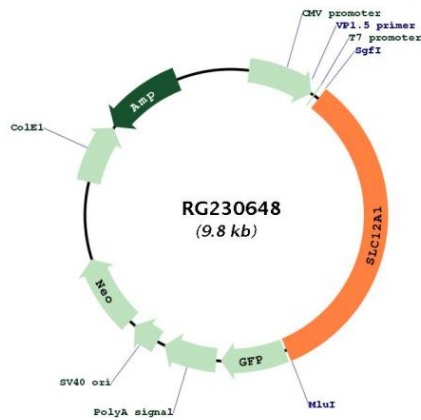
Cloning Scheme:



ACCN:	NM_001184832
ORF Size:	3297 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_001184832.2
RefSeq Size:	4717 bp
RefSeq ORF:	3300 bp
Locus ID:	6557
UniProt ID:	Q13621

Cytogenetics:	15q21.1
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	This gene encodes a kidney-specific sodium-potassium-chloride cotransporter that is expressed on the luminal membrane of renal epithelial cells of the thick ascending limb of Henle's loop and the macula densa. It plays a key role in concentrating urine and accounts for most of the NaCl resorption. It is sensitive to such diuretics as furosemide and bumetanide. Some Bartter-like syndromes result from defects in this gene. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional splice variants have been described but their biological validity in humans has not been experimentally proven. [provided by RefSeq, May 2010]

Product images:



Circular map for RG230648