

Product datasheet for **MG224573**

Slc5a12 (NM_001177624) Mouse Tagged ORF Clone

Product data:

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|---------------------------|-----------------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | Slc5a12 (NM_001177624) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Slc5a12 |
| Synonyms: | AI315119; D630015G19; SMCT2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>MG224573 representing NM_001177624
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGGTGAAGAAC**TTTGAAGCTTGGGATTATGTTGTGTTTGCAGGTCTCTTCGTCATTTCTCTGGAA**
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CTGGCCTACAGAATGACTCAAGCAAGACACCTTGGCTCAGATCCAGGCTACAACCTAAAGAAAAAG
CTACAGCAACAGTGTGCCGGAGAAGACCACTTATTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224573 representing NM_001177624
 Red=Cloning site Green=Tags(s)

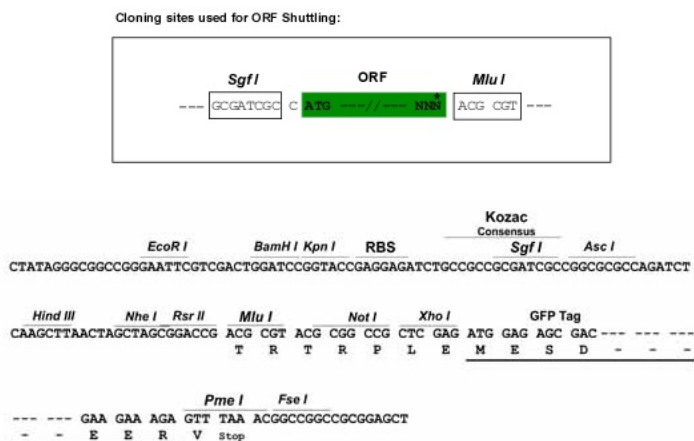
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TRTRPLE - GFP Tag - V

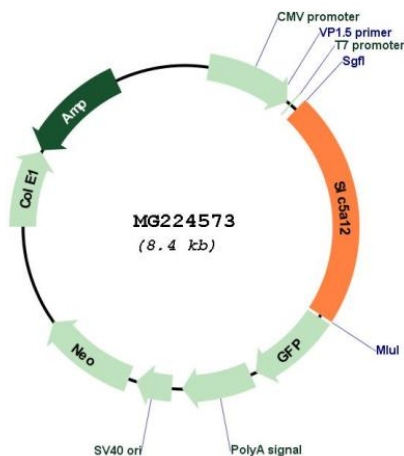
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001177624
 ORF Size: 1857 bp

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| 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: | <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: | NM_001177624.1 , NP_001171095.1 |
| RefSeq Size: | 5092 bp |
| RefSeq ORF: | 1860 bp |
| Locus ID: | 241612 |
| UniProt ID: | Q49B93 |
| Cytogenetics: | 2 E3 |
| Gene Summary: | Acts as an electroneutral and low-affinity sodium (Na(+))-dependent sodium-coupled solute transporter. Catalyzes the transport across the plasma membrane of many monocarboxylates such as lactate, pyruvate, nicotinate, propionate, butyrate and beta-D-hydroxybutyrate. May be responsible for the first step of reabsorption of monocarboxylates from the lumen of the proximal tubule of the kidney and the small intestine. May play also a role in monocarboxylates transport in the retina. Mediates electroneutral uptake of lactate, with a stoichiometry of 2 Na(+) for each lactate.[UniProtKB/Swiss-Prot Function] |