OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR211653

Slc12a5 (NM_020333) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc12a5 (NM_020333) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc12a5
Synonyms:	KCC2; mKIAA1176
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211653 representing NM_020333
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTCAACAACCTGACGGACTGCGAGGACGGCGATGGGGGAGCCAACCCCGGTGATGGCAACCCCAAAG
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CTACCCCAGGGAAGTAGAGAGCATGAAGAAGCAGAAAATAATGAGGGTGGAAAAAAGAAGCCGGTGCAGG
CTCCTCGAATGGGCACCTTCATGGGTGTGTACCTGCCGTGCCTGCAGAACATCTTTGGTGTCATCCTCTT
CCTGCGGCTCACGTGGGTGGTGGGCATCGCGGGCATCATGGAGTCCTTCTGTATGGTCTTCATTTGCTGC
TCCTGTACGATGCTCACAGCCATTTCCATGAGTGCAATCGCAACCAATGGTGTTGTGCCTGCTGGTGGCT
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GGAAGCTGTGAATGGCAACTTGGTGGTGGGCACCCTGGCCTGGCCTTCTCCCTGGGTCATCGTCATAGGC

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TCTTTCTTCTCTACCTGTGGGGCTGGATTACAGAGCCTCACAGGGGCCCCACGTCTGCTGCAGGCCATCT
CCCGGGATGGCATAGTGCCCTTCCTGCAGGTCTTTGGCCATGGCAAAGCTAATGGAGAGCCAACCTGGGC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211653 representing NM_020333
Red=Cloning site Green=Tags(s)

MLNNLTDCEDGDGGANPGDGNPKESSPFINSTDTEKGREYDGRNMALFEEEMDTSPMVSSLLSGLANYTN
LPQGSREHEEAENNEGGKKKPVQAPRMGTFMGVYLPCLQNIFGVILFLRLTWVVGIAGIMESFCMVFICC
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MAIFKAEDASGEAAAMLNNMRVYGTCVLTCMATVVFVGVKYVNKFALVFLGCVILSILAIYAGVIKSAFD
PPNFPICLLGNRTLSRHGFDVCAKLAWEGNETVTTRLWGLFCSSRLLNATCDEYFTRNNVTEIQGIPGAA
SGLIKENLWSSYLTKGVIVERRGMPSVGLADGTPVDMDHPYVFSDMTSYFTLLVGIYFPSVTGIMAGSNR
SGDLRDAQKSIPTGTILAIATTSAVYISSVVLFGACIEGVVLRDKFGEAVNGNLVVGTLAWPSPWVIVIG
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LSMFFLMCYMFVNLACAVQTLLRTPNWRPRFRYYHWTLSFLGMSLCLALMFICSWYYALVAMLIAGLIYK
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LPFLLRHHKVWRKCKMRIFTVAQMDDNSIQMKKDLTTFLYHLRITAEVEVVEMHESDISAYTYEKTLVME
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SCPSSSPSPGEEPEGERETDPEVHLTWTKDKSVAEKNKGPSPVSSEGIKDFFSMKPEWENLNQSNVRRMH
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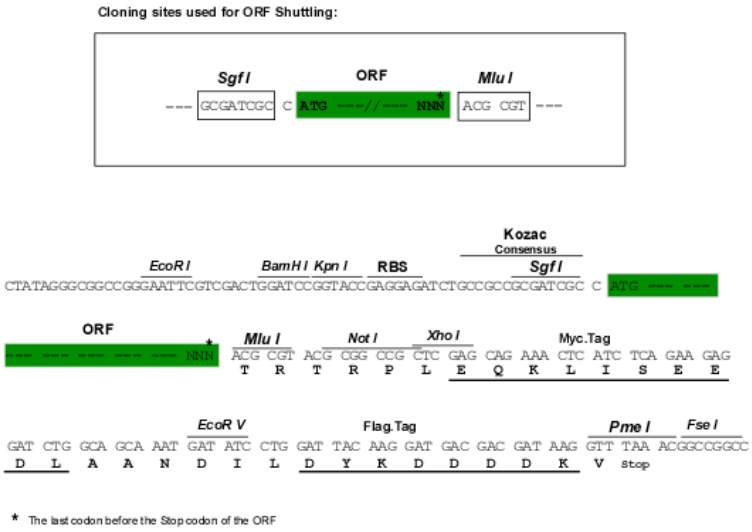
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9011_h02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020333

ORF Size: 3345 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_020333.2, NP_065066.2

RefSeq Size: 6042 bp

RefSeq ORF: 3348 bp

Locus ID: 57138

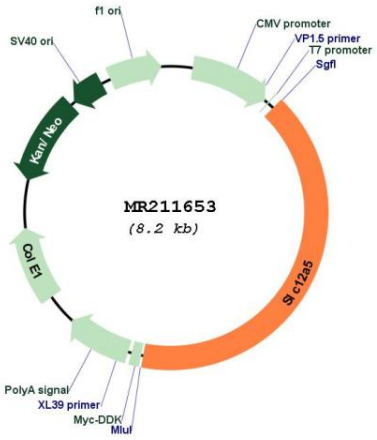
UniProt ID: Q91V14

Cytogenetics: 2 H3

MW: 124 kDa

Gene Summary: Mediates electroneutral potassium-chloride cotransport in mature neurons and is required for neuronal Cl(-) homeostasis. As major extruder of intracellular chloride, it establishes the low neuronal Cl(-) levels required for chloride influx after binding of GABA-A and glycine to their receptors, with subsequent hyperpolarization and neuronal inhibition. Involved in the regulation of dendritic spine formation and maturation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211653