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Product datasheet for MR226129

Clcn2 (NM_009900) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Clcn2 (NM_009900) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Clcn2
Synonyms:	AL118368; ClC-2; Clc2; nmf240
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR226129 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCTGCAACGGCTGCGGCGGCCGCGGCGGCGGCGGCGGGGGAAGGGATGGAGCCTCGAGCGCTGC
AGTACGAGCAGACCCTGATGTATGGCCGGTACACTCAGGAACTCGGGGCCTTTGCCAAAGAGGAAGCTGC
TCGTATTCGCCTGGGAGGGCCTGAGCCCTGGAAGGGGTCCCCTTCTGCCCGGGCTACCCCAGAGCTCCTA
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CAGTACCTGGCTTGGGTTACCTACCCCGTGGTCCTCATCACTTTCTCTGCTGGATTCACCCAGATCCTGG
CCCCACAGGCTGTCGGGTCTGGCATCCCCGAAATGAAAACCATCCTTCGGGGAGTGGTGCTGAAAGAATA
CCTCACCCTCAAGACCTTTGTAGCTAAGGTCATTGGGCTAACCTGTGCCCTGGGCAGTGGGATGCCCCTT
GGCAAAGAGGGACCCTTTGTGCACATTGCCAGCATGTGTGCCGCCCTTCTCAGCAAGTTCCTCTCCCTCT
TTGGGGGTATCTATGAGCATGAGTCCCGGAACACGGAGATGCTAGCTGCTGCATGCGCAGTAGGAGTGGG
CTGCTGCTTTGCCGCACCAATCGGAGGGGTCCTATTCAGCATTGAAGTCACCTCCACCTTCTTCGCTGTT
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TATGACAGTATCATCCGCATCAAGAAGCTGCCCTACCTACCTGAGCTGGGCTGGGGCCGCCACCAGCAGT
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CCTGCGGTTGGCACTGCACAGAACCAAGGGCCGTATGTTGGCCCTAGTGGAGTCTCCTGAGTCCATGATC
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CACCATCTTCTCATTGCTGGGAGTGGACCATGCTTATGTCACCAGCATTGGCAGACTCATTGGGATTGTC
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TCGCCAGTTTCCGGGACAGTGCCACCAGCAGCAGTGACACAGAGACCACTGAGGTGCATGCGCTCTGGGG
GCCAAGATCCCGCCACGGCCTCCCACGAGAGGGTACCCCCTCCGACAGTGATGACAAGTGCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

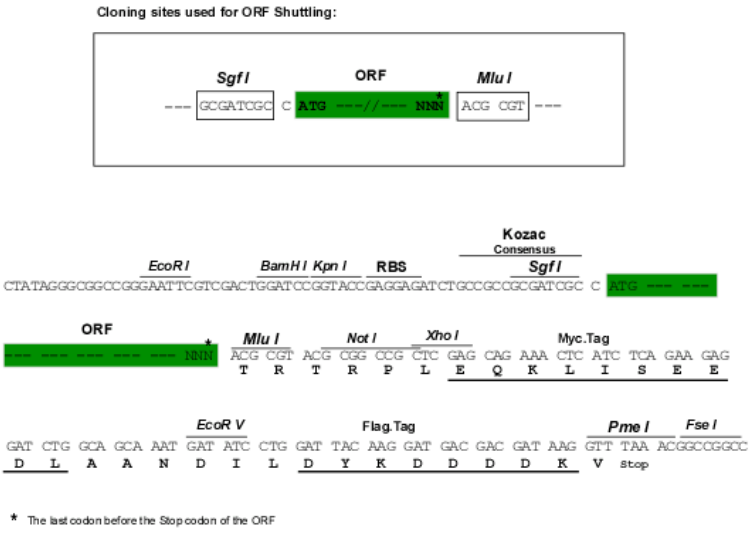
>MR226129 protein sequence
Red=Cloning site Green=Tags(s)

MAAATAAAAAAAAAGEGMEPRALQYEQTLMYGRYTQELGAFAKEEAARIRLGGPEPWKGSPSARATPELL
EYGQSRCARCRICSVRCHKFLVSRVGEDWIFLVLLGLLMALVSWAMDYAIAVCLQAQQWMSRGLNTNILL
QYLAWVTYPVVLITFSAGFTQILAPQAVGSGIPEMKTILRGVVLKEYLTLKTFVAKVIGLTCALGSGMPL
GKEGPFVHIASMCAALLSKFLSLFGGIYEHESRNTEMLAAACAVGVGCCFAAPIGGVLFSIEVTSTFFAV
RNYWRGFFAATFSAFIFRVLAVWNRDEETITALFKTRFRLDFPFDLQELPAFAVIGIASGFGGALFVYLN
RKIVQVMRKQKTINRFLMRKRLLFPALVTLLISTLTFPPGFGQFMAGQLSQKETLVTLFDNRTWVRQGLV
EDLELPSTSQAWSPPRANVFLTLVIFILMKFWMSALATTIPVPCGAFMPVFVIGAAFGRLVGESMAAWFP
DGIHTDSSTYRIVPGGYAVVGAAAALAGAVTHTVSTAVIVFELTGQIAHILPVMIAVILANAVAQSLQPSL
YDSIIRIKKLPYLPELGWGRHQQYRVRVEDIMVRDVPHVALSCTFRDLRLALHRTKGRMLALVESPESMI
LLGSIERSQVVALLGAQLSPARRRQHMQKLRKAQLSPPSDQESPPSSETSIRFQVNTEDSGFSGAHGQTH
KPLKPALKRGPSNSTSLQEGTTGNMESAGIALRSLFCGSPPLEATSELEKSESCDKRKLKRVRISLASDS
DPEAEMSPEEILEWEEQQLDEPVNFSDCKIDPAPFQLVERTSLHKTHTIFSLLGVDHAYVTSIGRLIGIV
TLKELRKAIEGSVTAQGVKVRPPLASFRDSATSSSDTETTEVHALWGPRSRHGLPREGTPSDSDDKCQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

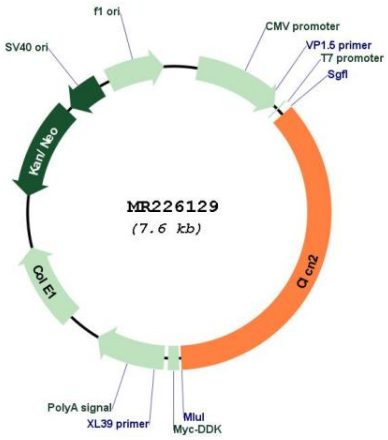
Cloning Scheme:



ACCN: NM_009900

ORF Size:	2727 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_009900.2, NP_034030.2
RefSeq Size:	3670 bp
RefSeq ORF:	2727 bp
Locus ID:	12724
UniProt ID:	Q9R0A1
Cytogenetics:	16 12.5 cM
MW:	99.4 kDa
Gene Summary:	Voltage-gated chloride channel. Chloride channels have several functions including the regulation of cell volume, membrane potential stabilization, signal transduction and transepithelial transport (By similarity). Involved in the regulation of aldosterone production. The opening of CLCN2 channels at hyperpolarized membrane potentials in the glomerulosa causes cell membrane depolarization, activation of voltage-gated Ca2+ channels and increased expression of aldosterone synthase, the rate-limiting enzyme for aldosterone biosynthesis (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226129