

Product datasheet for MR225328

Cldn12 (NM_001193660) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cldn12 (NM_001193660) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cldn12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR225328 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCTGCCGAGATGTCCACGCAGCCACCGTCCTGTCCTTCTGTGTGGTATTGCCTCTGTCGCAGGCC
TCTTTGCGGGGACTCTGCTTCTAACTGGAGGAACTGCGGCTGATCACATTCAACAGAAACGAGAAGAA
CCTGACGATTTACACGGGCTGTGGTGAAGTGTCCCGGATGATGGAAGCAGTGACTGCCTGATGTAC
GACCGTACGTGGTACCTGTCGGTTGACCAGCTGGACCTGCGTGCCTCCAGTTTGCCTGCCTCTCAGCA
TCGTGATCGCAATGGGTGCCTTGCTACTCTGCCTGATTGGAATGTGAACACGGCCTTCAATTCTCCGT
GCCTAACATCAAAGTGGCAAGTGTCTGGTCAATAGTGCAGGCTGCCACCTGGTGGCCGGACTCCTGTTT
TTTCTGGCAGGTACCGTGAAGCTCTCTCCGTCATCTGGCCATCTTTTATAACAGCCATCTCAACAGGA
AGTTTGAGCCGGTCTTTACCTTTGACTATGCAGTATTTGTCACTATTGCTAGCTCAGGGGTCTGTTTAT
GACTGCTCTCCTGCTGTTTCGTTTGGTATTGTGCATGCAAGTCTTTGCTCTCCTTTCTGGCAACCGCTG
TACTCTCAGCTCCCGGATGCACACTTACTCACAGCCCTATTCATCACGGTCCCGCTCTCTGCCATTG
AAATCGACATTCCAGTAGTCTCACAGCACT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR225328 protein sequence
Red=Cloning site Green=Tags(s)

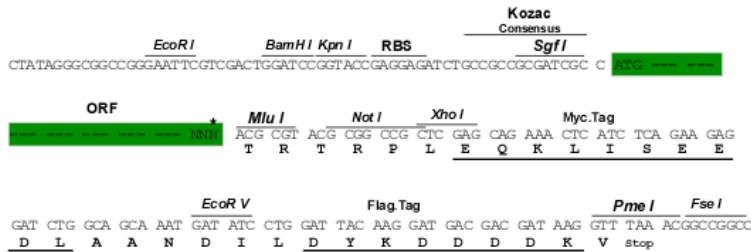
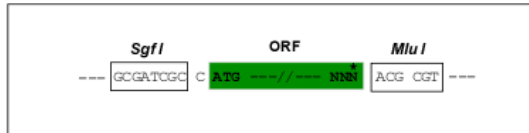
MGCRDVHAATVLSFLCGIASVAGLFAGTLLPNWRKRLITFNRNEKNLTIYTGLWVKARYDGSDDLMLY
DRTWYLSVDQLDLRVLQFALPLSIVIAMGALLLCLIGMCNTAFNSSVPNIKLAKCLVNSAGCHLVAGLLF
FLAGTVSLSPSIWAIIFYNSHLNRKFEPVFTFDYAVFVTIASSGGLFMTALLLVWYACKSLSSPFWQPL
YSHAPGMHTYSQPYSRSRSLSAIEIDIPVVSHT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001193660

ORF Size: 732 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_001193660.1](#), [NP_001180589.1](#)

RefSeq Size: 3752 bp

RefSeq ORF: 735 bp

Locus ID: 64945

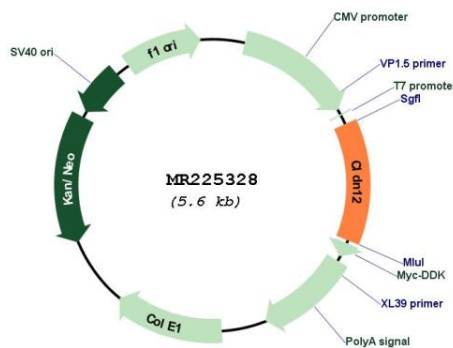
UniProt ID: [Q9ET43](#)

Cytogenetics: 5 A1

MW: 27 kDa

Gene Summary: This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. This gene, along with several other family members, is expressed in the inner ear. The protein encoded by this gene and another family member, claudin 2, are critical for vitamin D-dependent Ca²⁺ absorption between enterocytes. Multiple alternatively spliced transcript variants encoding the same protein have been found. [provided by RefSeq, Oct 2011]

Product images:



Circular map for MR225328