

## Product datasheet for **MG226979**

### Cldn10 (NM\_001160099) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cldn10 (NM\_001160099) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Cldn10  
**Synonyms:** 672045616Rik; Cldn; Cldn1; Cldn10a; Cldn10b; D14Ertd728; D14Ertd728e  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG226979 representing NM\_001160099  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTAGCACGGCCTTGAAATCGTCGCCTTCGTAGTCTCCATCTCGGGCTGGGTGCTAGTGTCTTCCA  
CACTGCCACCGACTACTGGAAGGTCTCCACCATCGATGGCACTGTCATCACCACAGCCACTTATTTTGC  
CAACTGTGGAAGATCTGCGTTACCGATTCCACCGGTGTCGCCAACTGCAAGGAGTCCCTCCATGCTG  
GCGTTGGATGTTACATCCAGGCATGTAGAGGACTAATGATCGTCGGTCAGCCTGGGATTTTCGGTT  
CCATTTTGCCTCTTTGGAATGAAATGTACCAAAGTCGGAGGCTCAGATCAAGCCAAAGCTAAAATTGC  
TTGCTTGCCGGGATTGTATTCATATTGTCAAGTCTGTGTTCCATGACAGGCTGTCCCTGTATGCAAAC  
AAAATCACAACAGAATTCTTTGATCCTCTTTATATGGAGCAAAAATGGGCTACACATACAACGGACCCA  
CGTCTGCCATGTCTTCTCGGACCAAGTATCAAGGCGGAGAAGGAGATTTTAAACCAAGCCCTTCAA  
ACAGTTTGATAAAAATGCCTATGTC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG226979 representing NM\_001160099  
Red=Cloning site Green=Tags(s)

MASTALEIVAFVVISISGWLVSSTLPTDYWKVSTIDGTVITTATYFANLWKICVTDSTGVANCKEFPMSL  
ALDGYIQACRGLMIAAVSLGFFGSIFALFGMKCTKVGGSDQAKAKIACLAGIVFILSGLCSMTGCSLYAN  
KITTEFFDPLYMEQKMGYTYNGPTSAMSSRTKYQGEGDFKTTGPSKQFDKNAYV

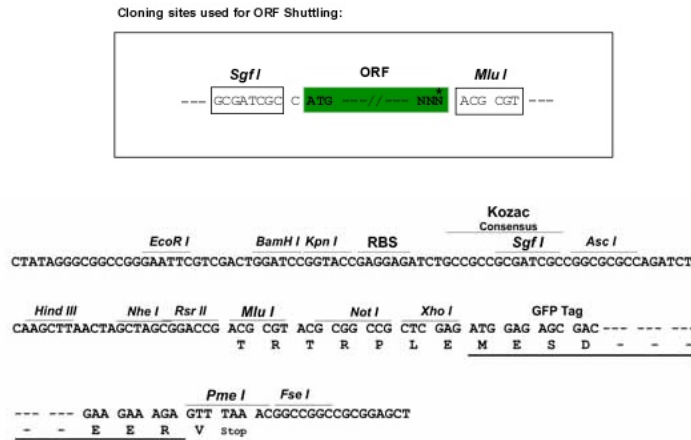
**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

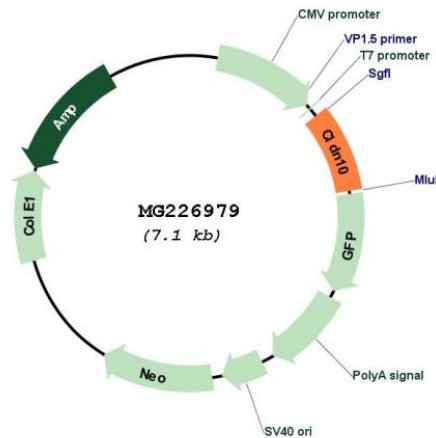


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_001160099

ORF Size: 585 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\\_001160099.1](#), [NP\\_001153571.1](#)

**RefSeq Size:** 852 bp

**RefSeq ORF:** 588 bp

**Locus ID:** 58187

**UniProt ID:** [Q9Z0S6](#)

**Cytogenetics:** 14 62.55 cM

**Gene Summary:** This intronless 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. Six alternatively spliced transcript variants have been identified, which encode different isoforms with distinct electric charge of the first extracellular loop and with or without the fourth transmembrane region. These isoforms exhibit distinct localization and function in paracellular anion or cation permeability. [provided by RefSeq, Aug 2010]