

Product datasheet for **MG226976**

Cldn10 (NM_023878) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cldn10 (NM_023878) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cldn10
Synonyms:	6720456I16Rik; 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:	>MG226976 representing NM_023878 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCAGGGCACAGATCTCAGCTCTGGTGTGTGGTGTGGAGGGTTGGTGTCTCGTCGCTGCCACCA
CATCCAACGAATGGAAAGTGACCACCCGAGCGTCGTCTGTGATTACGCCACCTGGGTTTACCAGGGTCT
GTGGATGAACTGCGCAGGTAACGCTCTGGGCTCCTTCCACTGCCGGCCACATTTCACTATCTTCAAAGTA
GAAGGTTACATCCAGGCATGTAGAGGACTAATGATCGCTGCGGTCAGCCTGGGATTTTCGGTTCATTT
TTGCACCTTTTGAATGAAATGTACCAAAGTCGGAGGCTCAGATCAAGCCAAAGCTAAAATTGCTTGCTT
GGCCGGGATTGTATTCATATTGTCAAGTCTGTGTTCCATGACAGGCTGTTCCCTGTATGCAACAAAATC
ACAACAGAATTCTTTGATCCTCTTTATATGGAGCAAAAGTATGAATTAGGGGCTGCTCTCTTCATCGGAT
GGCAGGAGCTTCTCTCTGCATCATTGGGGGAGTCATATTTTGCTTTTCAATATCCGACAACAACAAGAC
ACCCAGAATGGGCTACACATACAACGGACCCACGTCGCCATGCTTCTCGGACCAAGTACAAGGCGGA
GAAGGAGATTTTAAAACACAGGCCCTTCAAACAGTTTGATAAAAATGCCTATGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG226976 representing NM_023878
Red=Cloning site Green=Tags(s)

MSRAQISALVCGVGGFGALVAATTSNEWKVTTTRASSVITATWVYQGLWMNCAGNALGSFHCRPHFTIFKV
 EGYIQACRGLMIAAVSLGFFGSIFALFGMKCTKVGGSDQAKAKIACLAGIVFILSGLCSMTGC SLYANKI
 TTEFFDPLYMEQKYELGAALFIGWAGASLCIIGGVIFCF SISDNNKTPRMGYTYNGPTSAMSSRTKYQGG
 EGDFTTGPSKQFDKNAYV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023878

ORF Size: 687 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_023878.3](#), [NP_076367.2](#)

RefSeq Size: 1200 bp

RefSeq ORF: 690 bp

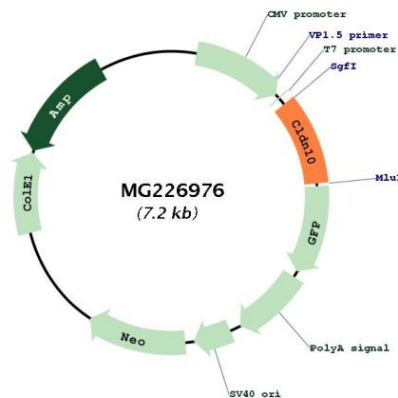
Locus ID: 58187

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]

Product images:



Circular map for MG226976