

## Product datasheet for **MC210061**

### Cldn18 (NM\_001194921) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cldn18 (NM\_001194921) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cldn18  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >MC210061 representing NM\_001194921  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTCGGTGACCGCTGCCAGGGCTTGGGGTTTGTGGTGTCACTGATCGGGTTTGCGGGCATCATTGCAG  
CCACTTGTATGGACCAGTGGAGCACCCAGGATTTATAACAACCCGGTGACCGCTGTATTCAACTACCA  
AGGGCTATGGCGTTCATGCGTCCGAGAGAGCTCTGGCTTACCCGAGTGCCGAGGCTACTTCACCCCTGTTG  
GGGTTGCCAGCCATGCTGCAAGCTGTACGAGCCCTGATGATCGTGGGCATTGTTCTGGGGTCATCGGTA  
TCCTCGTGTCCATCTTCGCCCTGAAGTGCATTGCGATTGGTAGCATGGATGACTCTGCCAAGGCCAAGAT  
GACTCTGACTTCTGGGATCTTGTTCATCATCTCCGGCATCTGTGCAATCATTGGTGTGTCTGTGTTTGCC  
AACATGCTGGTGACCAACTTCTGGATGTCCACAGCTAACATGTACAGCGGCATGGCGGCATGGGTGGCA  
TGGTGCAGACCGTTCAGACCAGGTACACCTTTGGTGCAGCTCTGTTGTTGGGCTGGGTTGCTGGAGGCC  
CACCCCTGATTGGGGGAGTGATGATGTGCATCGCCTGCCGTGGCCTGACACCAGATGACAGCAACTTCAA  
GCTGTGCTTACCATGCCTCTGGCCAAATGTTGCCTACAGGCCTGGAGGCTTTAAGGCCAGCACTGGCT  
TTGGGTCCAACACCAGAAACAAGAAGATCTACGATGGGGGTGCCCGCACAGAAGACGATGAACAGTCTCA  
TCCTACCAAGTATGACTATGT**GTAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2454\\_f04.zip](https://cdn.origene.com/chromatograms/ja2454_f04.zip)  
**Restriction Sites:** Sgfl-MluI  
**ACCN:** NM\_001194921  
**Insert Size:** 795 bp



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001194921.1](#), [NP\\_001181850.1](#)

**RefSeq Size:** 2774 bp

**RefSeq ORF:** 795 bp

**Locus ID:** 56492

**UniProt ID:** [P56857](#)

**Cytogenetics:** 9 E3.3

**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 is a downstream target gene regulated by the T/EBP/NKX2.1 homeodomain transcription factor. Four alternatively spliced transcript variants resulted from alternative promoters and alternative splicing have been identified, which encode two lung-specific isoforms and two stomach-specific isoforms respectively. This gene is also expressed in colons, inner ear and skin, and its expression is increased in both experimental colitis and ulcerative colitis. [provided by RefSeq, Aug 2010]

Transcript Variant: This variant (A2.1) is the stomach-specific form. It has an alternate 5' exon, as compared to variant A1.1. The resulting isoform (A2.1) is the same size but has a different N-terminus, as compared to isoform A1.1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.