

## Product datasheet for **MG225404**

### **Cldn1 (NM\_016674) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cldn1 (NM\_016674) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Cldn1  
**Synonyms:** AI596271  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG225404 representing NM\_016674  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCAACGCGGGGCTGCAGCTGCTGGGTTTCATCCTGGCTTCTCTGGGATGGATCGGCTCCATCGTCA  
GCACTGCCCTGCCCCAGTGGAAGATTTACTCCTATGCTGGGGACAACATCGTGACCGCTCAGGCCATCTA  
CGAGGGACTGTGGATGTCCTGCGTTTCGAAAGCACCGGGCAGATACAGTGCAAAGTCTTCGATTCCTTG  
CTGAATCTGAACAGTACTTTCAGGCAACCCGAGCCTTGATGGTAATTGGCATCCTGCTGGGGCTGATCG  
CAATCTTTGTGTCCACCATTGGCATGAAGTGCATGAGGTGCCTGGAAGATGATGAGGTGCAGAAGATGTG  
GATGGCTGTCATTGGGGGCATAATATTTTAATTCAGGTCTGGCGACATTAGTGCCACAGCATGGTAT  
GGAAACAGAATTGTTCAAGAATTCTATGACCCCTTGACCCCATCAATGCCAGGTATGAATTTGGCCAGG  
CCCTCTTTACTGGCTGGGCCGCTGCCTCCCTCTGCCTTCTGGGAGGTGTCTACTTTCTGCTCCTGTCC  
CCGGAAAACAACCTTTACCCAACACCACGGCCTTATCCAAGCCAACACCTTCTAGTGGGAAAGACTAT  
GTG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG225404 representing NM\_016674  
 Red=Cloning site Green=Tags(s)

MANAGLQLLGFILASLGWIGSIVSTALPQWKIYSYAGDNIVTAQAIYEGLWMSCVSQSTGGQIQCKVFDSL  
 LNLNSTLQATRALMVGILLGLIAIFVSTIGMKCMRCLDEDEVQKMMMAVIGGIIFLISGLATLVATAWY  
 GNRIVQEFYDPLTPINARYEFGQALFTGWAAASLCLLGGVLLSCSCPRTTSYPTPRYPKPTPSSGKDY  
 V

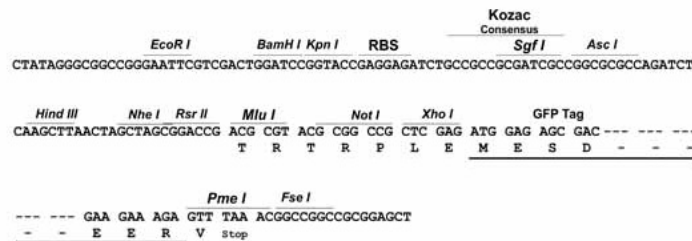
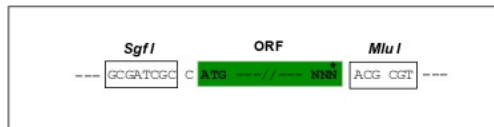
TRTRPLE - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2277\\_e12.zip](https://cdn.origene.com/chromatograms/ja2277_e12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_016674

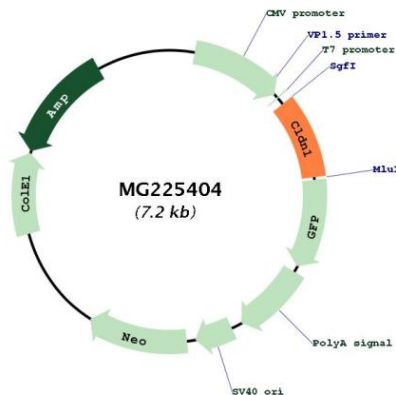
**ORF Size:** 633 bp

**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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_016674.4</a></u> , <u><a href="#">NP_057883.1</a></u>
<b>RefSeq Size:</b>	3263 bp
<b>RefSeq ORF:</b>	636 bp
<b>Locus ID:</b>	12737
<b>UniProt ID:</b>	<u><a href="#">O88551</a></u>
<b>Cytogenetics:</b>	16 B2
<b>Gene Summary:</b>	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. The knockout mice lacking this gene die soon after birth as a consequence of dehydration from trantermal water loss, indicating that this gene is indispensable for creating and maintaining the epidermal barrier. The protein encoded by this gene also has gastric tumor suppressive activity, and is a key factor for hepatitis C virus (HCV) entry. [provided by RefSeq, Aug 2010]

**Product images:**


Circular map for MG225404