

## Product datasheet for **MC212266**

### **Cldn16 (NM\_053241) Mouse Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cldn16 (NM\_053241) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cldn16  
**Synonyms:** claudi; claudin-16; PC; PCLN1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC212266 representing NM\_053241  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAAGGATCTTCTTCAGTACGCTGCCTGCTTCTTGGCCATATTCTCCACTGGGTTTTTGATCGTGGCCA  
CCTGGACAGACTGTTGGATGGTGAACGCTGATGACTCCCTGGAGGTGAGCACTAAATGCAGAGGCCCTGTG  
GTGGGAGTGTGTAACAAACGCTTTTGTGGGATTCGAACCTGCGATGAGTACGACTCCATATATGCAGAA  
CATCCCTTGAAGCTGGTGGTAACTCGAGCACTGATGATCACAGCTGACATTTTAGCTGGCTTTGGATTCA  
TCAACCTGCTCCTTGGTCTGGACTGTGTGAAGTTCCTACCTGATGACCCACAAATTAAGTCCGCCCTTTG  
CTTTGTTGCAGGGACCACACTACTATTGCAGGTACCCAGGAATCATCGGTTCTGTGTGGTATGCTGTG  
GATGTTTACGTCGAACGCTCCTCTCTGTTTTACACAATATTTTCTGGGATCCAATAAAATTTGGTT  
GGTCTGCTGGCTTGAATGGCTGGTCTTTGGTTGCTTTTGGCAGGAGCTCTCTCACCTGCTGTTT  
GTACCTCTCAAAGATGTTGGCCTGAGAGGAACCTACCCTATGCCATGAGGAAGCCCTATTCAACTGCA  
GGTGTGCCATGGCCAAGTCTACAAGGCCCTCGGACAGAGACGCCAAAATGTATGCTGTAGACACCA  
GAGT**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_053241  
**Insert Size:** 708 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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>	<a href="#">NM_053241.5</a> , <a href="#">NP_444471.1</a>
<b>RefSeq Size:</b>	1173 bp
<b>RefSeq ORF:</b>	708 bp
<b>Locus ID:</b>	114141
<b>UniProt ID:</b>	<a href="#">Q925N4</a>
<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 protein encoded by this gene is critical for renal paracellular epithelial transport of Ca(2+) and Mg(2+) in the thick ascending loop of Henle. The gene deficiency leads to specific alterations in renal Ca(2+) and Mg(2+) balance and also to disturbances in Na(+) handling. The interaction of this gene and the Cldn 19 gene is required for their assembly into tight junctions and for renal Mg(2+) reabsorption. This gene and the Cldn1 gene are clustered on chromosome 16. [provided by RefSeq, Aug 2010]