

## Product datasheet for MR225359

### Cldn7 (NM\_001193619) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cldn7 (NM\_001193619) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cldn7  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR225359 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCCAACCTCGGGCCTGCAACTGCTGGGCTTTTCAATGGCCATGCTTGGCTGGGTGGGCCTGATAGCGA  
 GCACTGCCATCCCTCAGTGGCAGATGAGCTCCTATGCGGGCGACAACATCATCACAGCCCAGGCCATGTA  
 CAAGGGGCTCTGGATGGAGTGCCTCACGCAGAGCACCGGCATGATGAGCTGCAAAATGTACGACTCGGTG  
 CTCGCCCTGCCGGAGCCCTGCAGGCCACTCGAGCCTTAATGGTGGTGTCCCTGGTGTGGGCTTCTTAG  
 CCATGTTTGTGCCACGATGGGCATGAAGTGCACACGCTGTGGGGGAGATGACAAAGCGAAGAAGGCCCG  
 AATAGCTATGACTGGAGCATTGTTTTATTGTGGCAGGTCTTGCTGCCTTGGTAGCATGTTCTCTGGATT  
 GGTATCAGATTGTCACAGACTTTTATAACCCCTTGACGCCATGAACGTTAAGTACGAGTTTGGACCTG  
 CCATCTTTATCGGCTGGCAGGGTCTGCTCTGGTCTTCTGGGAGGTGCCCTGCTCTCTTCTCTGCTGCC  
 AGGCAGTGAAAGCAAAGCTGCGTACCGAGCACCCGCTCTTACCCCAAGTCCAATTCCTCCAAGGAATAC  
 GTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR225359 protein sequence  
 Red=Cloning site Green=Tags(s)

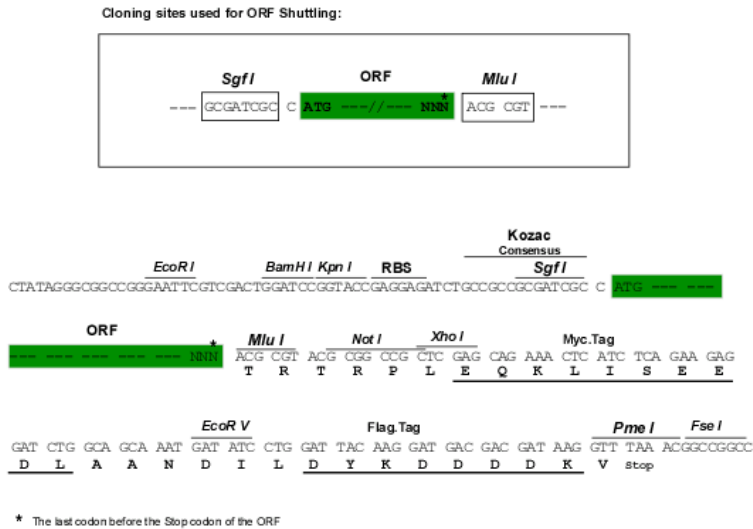
MANSGQLLLGFSMAMLGWVGLIASTAIPQWQMSSYAGDNIITAQAMYKGLWMECVTQSTGMMSCMYDSV  
 LALPGALQATRALMVVSLVLGFLAMFVATMGMKTRCGGDDKAKKARIAMTGGIVFVAVGLAALVACSWI  
 GHQIVTDFYNPLTPMNVKYEFGPAIFIGWAGSALVLLGGALLSCSCPSESKAAYRAPRSYPKSNSSKEY  
 V

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**



**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001193619

**ORF Size:** 636 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\\_001193619.1](#), [NP\\_001180548.1](#)

**RefSeq Size:** 989 bp

**RefSeq ORF:** 636 bp

**Locus ID:** 53624

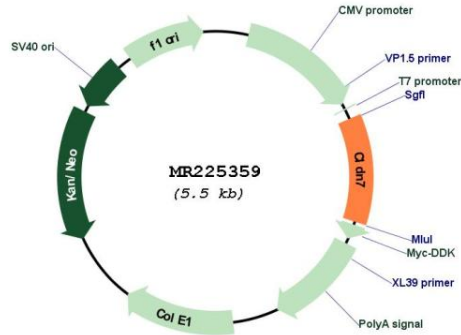
**UniProt ID:** [Q9Z261](#)

Cytogenetics: 11 B3

MW: 22.4 kDa

**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 expressed constitutively in the mammary epithelium throughout development, and might be involved in vesicle trafficking to the basolateral membrane. It is essential for NaCl homeostasis in distal nephrons. The knockout mice lacking this gene showed severe salt wasting, chronic dehydration, and growth retardation, and died within 12 days after birth. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Aug 2010]

### Product images:



Circular map for MR225359