

## Product datasheet for MR225225

### Cldn18 (NM\_001194923) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cldn18 (NM\_001194923) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cldn18  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR225225 representing NM\_001194923  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCGGTGACCGCCTGCCAGGGCTTGGGGTTTGTGGTGTCACTGATCGGGTTTGCGGGCATCATTGCAG  
 CCACTTGTATGGACCAGTGGAGCACCCAGGATTTATACAACAACCCGGTGACCGCTGTATTCAACTACCA  
 AGGGCTATGGCGTTCATGCGTCCGAGAGAGCTCTGGCTTACCAGAGTCCGAGGCTACTTACCCTGTTG  
 GGGTTGCCAGCCATGCTGCAAGCTGTACGAGCCCTGATGATCGTGGGCATTGTTCTGGGGTTCATCGGTA  
 TCCTCGTGTCCATCTTCGCCCTGAAGTGCATTTCGCATTGGTAGCATGGATGACTCTGCCAAGGCCAAGT  
 GACTCTGACTTCTGGGATCTTGTTCATCATCTCCGGCATCTGTGCAATCATTGGTGTGTCTGTGTTTGCC  
 AACATGCTGGTGACCAACTTCTGGATGTCCACAGCTAACATGTACAGCGCATGGCGGCATGGGTGGCA  
 TGGTGCAGACCGTTCAGACCAGGTACACCTTTGGTGCAGCTCTGTTCTGGGGCTGGGTGCTGGAGGCC  
 CACCCTGATTGGGGGAGTGATGATGTGCATCGCCTGCCGTGGCCTGACACCAGATGACAGCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR225225 representing NM\_001194923  
 Red=Cloning site Green=Tags(s)

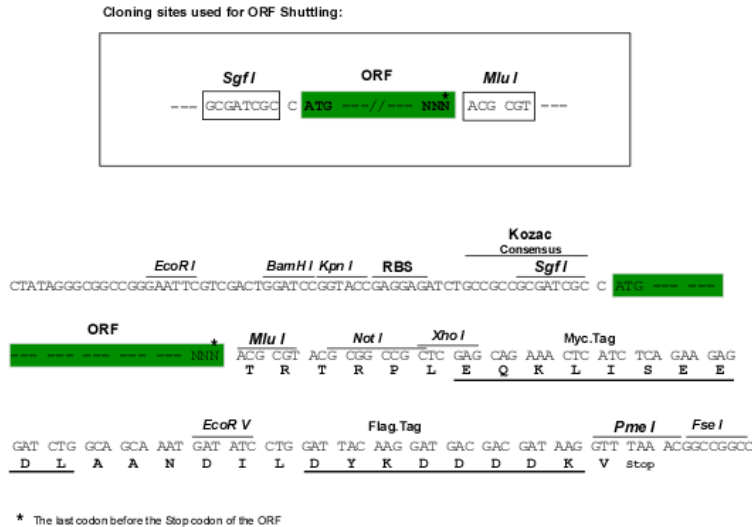
MSVTACQGLGFVVSILIGFAGIIAATCMDQWSTQDLYNNPVTAVFNQGLWRSCVRESSGFTECRGYFTLL  
 GLPAMLQAVRALMIVGIVLGVIGILVSIFALKCIRIGSMDDSAKAKMTLTSGLFIIISGICAIIGVSVFA  
 NMLVTNFWMSTANMYSMGGMGMVQTVQTRYTFGAALFVGWVAGGLTLIGGVMMCIACRGLTPDDSK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_001194923

**ORF Size:** 624 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\\_001194923.1](#), [NP\\_001181852.1](#)

**RefSeq Size:** 2786 bp

**RefSeq ORF:** 627 bp

**Locus ID:** 56492

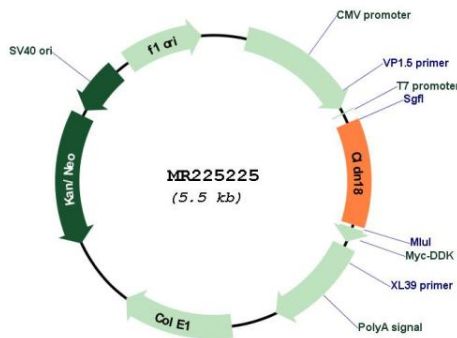
**UniProt ID:** [P56857](#)

**Cytogenetics:** 9 E3.3

**MW:** 22.5 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 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]

**Product images:**



Circular map for MR225225