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# Product datasheet for MG225523

## Cldn11 (NM_008770) Mouse Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Cldn11 (NM_008770) Mouse Tagged ORF Clone |
| **Tag:** | TurboGFP |
| **Symbol:** | Cldn11 |
| **Synonyms:** | Claudin-11; Claudin11; Osp; Ot; Otm |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-AC-GFP (PS100010) |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |

**ORF Nucleotide Sequence:**

>MG225523 representing NM_008770
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTAGCCACTTGCCTTCAGGTGGTGGGTTTCGTCACGAGCTTCGTGGGTTGGATTGGCATCATCGTCA
CAACGTCCACCAATGACTGGGTGGTGACCTGCAGCTACACCATCCCCACCTGCCGAAAAATGGACGAACT
GGGCTCCAAGGGCCTGTGGGCTGACTGCGTCATGGCCACTGGTCTCTACCACTGCAAACCCCTGGTGGAC
ATCCTCATCCTTCCAGGCTACGTGCAGGCTTGTAGAGCCCTCATGATTGCTGCCTCCGTTCTGGGCCTGC
CCGCCATCTTGCTGCTGTTGACAGTTCTCCCCTGCATCCGAATGGGCCACGAGCCTGGAGTGGCCAAGTA
CAGGCGAGCCCAGCTGGCTGGGGTGCTCCTTATTCTGCTGGCTCTCTGCGCCATTGTCGCCACCATCTGG
TTTCCTGTATGTGCCCACCGCGAGATCACCATCGTGAGCTTTGGCTACTCGCTGTACGCAGGTTGGATCG
GTGCTGTGATGTGCCTGGTGGGTGGCTGTGTCATCGTCTGCTGCTCCGGGGATGCACAGTCATTTGGAGA
AAACCGTTTCTATTACTCTTCTGGTTCCAGCTCGCCAACGCATGCCAAGAGTGCCCATGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG225523 representing NM_008770
Red=Cloning site Green=Tags(s)

MVATCLQVVGFVTSFVGWIGIIVTTSTNDWVVTCSYTIPTCRKMDELGSKGLWADCVMATGLYHCKPLVD
ILILPGYVQACRALMIAASVLGLPAILLLLTVLPCIRMGHEPGVAKYRRAQLAGVLLILLALCAIVATIW
FPVCAHREITIVSFGYSLYAGWIGAVMCLVGGCVIVCCSGDAQSFGENRFYYSSGSSSPTHAKSAHV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

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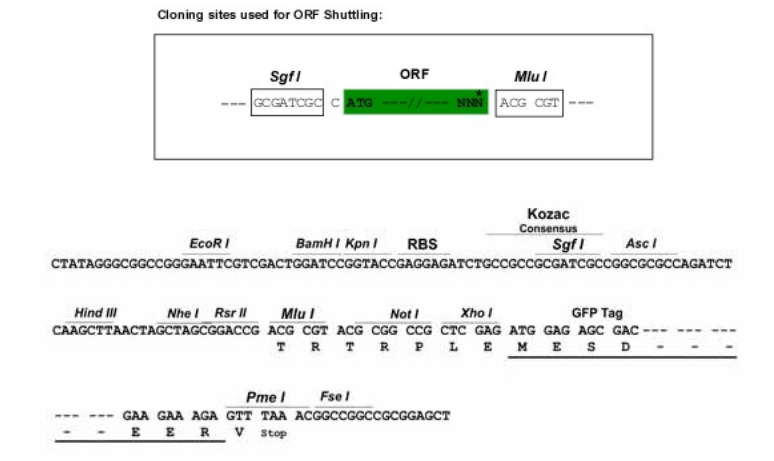
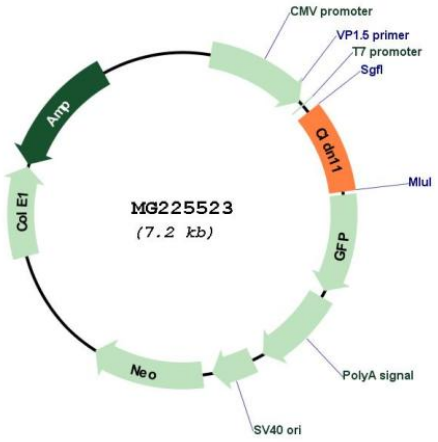
**Cloning Scheme:**




**Plasmid Map:**




| | |
|---|---|
| **ACCN:** | NM_008770 |
| **ORF Size:** | 621 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_008770.3, NP_032796.1

**RefSeq Size:** 1872 bp

**RefSeq ORF:** 624 bp

**Locus ID:** 18417

**UniProt ID:** Q60771

**Cytogenetics:** 3 15.14 cM

**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. The protein encoded by this gene is a major component of CNS (central nervous system) myelin and plays an important role in regulating proliferation and migration of oligodendrocytes. The basal cell tight junctions in stria vascularis are primarily composed of this protein, and the gene-null mice suffer severe deafness. This protein is also an obligatory protein for tight junction formation and barrier integrity in the testis and the gene deficiency results in loss of the Sertoli cell epithelial phenotype in the testis. [provided by RefSeq, Aug 2010]