

Product datasheet for **MG224818**

Cldn4 (NM_009903) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cldn4 (NM_009903) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Cldn4
Synonyms: Cep-r; Cpe; Cpet; Cpetr; Cpetr1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG224818 representing NM_009903
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGTCTATGGGACTACAGGTCCTGGGAATCTCCTTGGCAGTCCTGGGCTGGCTGGGGATCATCCTGA
 GTTGTGCGCTCCCATGTGGCGGTGACCGCCTTCATCGGCAGCAACATCGTCACGGCACAGACCAGCTG
 GGAGGGCCTCTGGATGAAGTGGTGCAGAGCACAGGTCAGATGCAGTGCAAGATGTACGACTCGATG
 CTCGCCCTGCCGAGGACCTGCAGGCCGCCGAGCCCTTATGGTCATCAGCATCATCGTGGGTGCTCTGG
 GGATGCTTCTCTCAGTGGTAGGGGGCAAGTGCACCAACTGCATGGAGGACGAGACCGTCAAGGCCAAGAT
 CATGATCACCGCCGAGCCGTGTTTCATCGTGGCAAGCATGCTGATTATGGTGCCCGTGTCTGGACCGCT
 CACAACGTCATCCGCGACTTCTACAACCTATGGTGGCTTCCGGGCAGAGAGGGAAATGGGGGCCCTCGC
 TTTACGTCGGCTGGGCGGCCTCCGGGCTGCTGCTCCTGGGAGGAGGCCTCCTCTGCTGCAGTTGCCACCC
 TCGTAGCAACGACAAGCCCTACTCGGCCAAGTACTCCGCCGCCGCTCTGTCCCCGCCAGCAACTATGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224818 representing NM_009903
 Red=Cloning site Green=Tags(s)

MASMGLQVLGISLAVLGWLGIILSCALPMWRVTAFIGSNIVTAQTSWEGLWMNCVVQSTGQMCKMYDSM
 LALPQDLQAARALMVISIIVGALGMLLSVVGKCTNCMEDETAKIMITAGAVFIVASMLIMVPVSWTA
 HNVIRDFYNPMVASGQKREMGASLYVGWAASGLLLGGGLCCSCPPRSNDKPYSKYSARSVPASNYV

TRTRPLE - GFP Tag - V

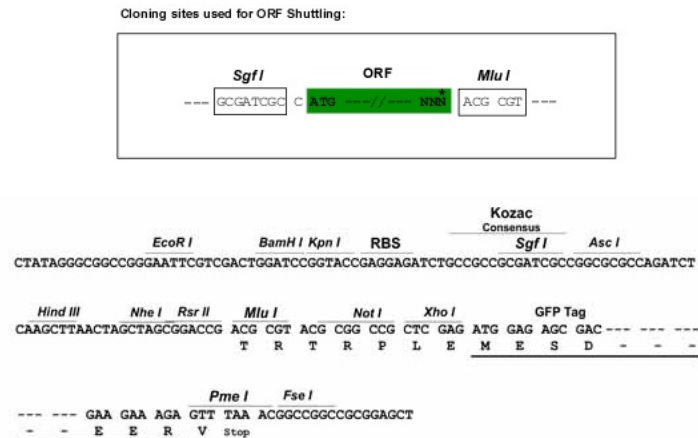
Chromatograms: https://cdn.origene.com/chromatograms/ja2368_f11.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009903

ORF Size: 630 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 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.

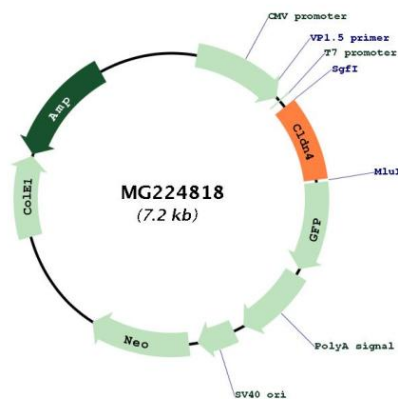
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_009903.2, NP_034033.1</u>
RefSeq Size:	1827 bp
RefSeq ORF:	633 bp
Locus ID:	12740
UniProt ID:	<u>O35054</u>
Cytogenetics:	5 74.9 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 high-affinity receptor for clostridium perfringens enterotoxin (CPE) produced by the bacterium Clostridium perfringens, and the interaction with CPE results in increased membrane permeability by forming small pores in plasma membrane. This protein augments alveolar epithelial barrier function and is induced in acute lung injury. It is highly expressed in pancreatic and ovarian cancers. [provided by RefSeq, Aug 2010]

Product images:



Circular map for MG224818