

Product datasheet for MR224818

Cldn4 (NM_009903) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cldn4 (NM_009903) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cldn4
Synonyms: Cep-r; Cpe; Cpet; Cpetr; Cpetr1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR224818 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGTCTATGGGACTACAGGTCCTGGGAATCTCCTTGGCAGTCCTGGGCTGGCTGGGGATCATCTGA
 GTTGTGCGCTCCCATGTGGCGGTGACCGCTTCATCGGCAGCAACATCGTCACGGCACAGACCAGCTG
 GGAGGGCCTCTGGATGAAGTGGTGCAGAGCACAGGTCAGATGCAGTGAAGATGTACGACTCGATG
 CTGCCCTGCCGAGGACCTGCAGGCCGCCGAGCCCTTATGGTCATCAGCATCATCGTGGGTGCTCTGG
 GGATGCTTCTCAGTGGTAGGGGCAAGTGCACCAACTGCATGGAGGACGAGACCGTCAAGGCCAAGAT
 CATGATCACCGCCGAGCCGTGTTTCATCGTGGCAAGCATGCTGATTATGGTGCCCGTGTCTGGACCGCT
 CACAACGTCATCCGCGACTTCTACAACCCTATGGTGGCTTCCGGGCAGAAGAGGGAAATGGGGCCCTCGC
 TTTACGTGGGCTGGGCGGCTCCGGGCTGCTGCTCCTGGGAGGAGGCTCCTCTGCTGCAGTTGCCACC
 TCGTAGCAACGACAAGCCCTACTCGGCCAAGTACTCCGCCGCCGCTCTGTCCCCGCCAGCAACTATGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR224818 protein sequence
 Red=Cloning site Green=Tags(s)

MASMGQLVGLISLAVLGWLGII LSCALPMWRVTAFIGSNIVTAQTSWEGLWMNCVVQSTGQMCKMYDSM
 LALPQDLQAARALMVISIIVGALGMLLSVVGKCTNCMEDETVKAKIMITAGAVFIVASMLIMVPSWTA
 HNVIRDFYNPMVASGQKREMGASLYVGWAASGLLLLGGLLCCSCPPRSNDKPYSAKYSAARSVPASNYV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009903

ORF Size: 633 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.

RefSeq: [NM_009903.2](#), [NP_034033.1](#)

RefSeq Size: 1827 bp

RefSeq ORF: 633 bp

Locus ID: 12740

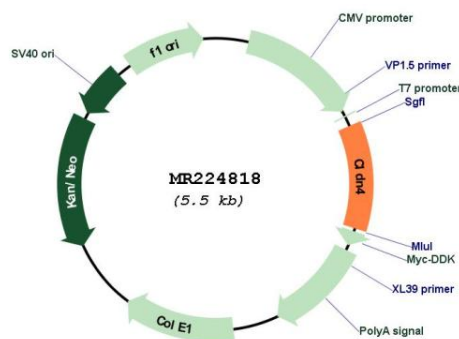
UniProt ID: [O35054](#)

Cytogenetics: 5 74.9 cM

MW: 22.3 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. 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 MR224818