

## Product datasheet for **RG200490**

### Claudin 4 (CLDN4) (NM\_001305) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Claudin 4 (CLDN4) (NM\_001305) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Claudin 4  
**Synonyms:** CPE-R; CPER; CPETR; CPETR1; hCPE-R; WBSCR8  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG200490 representing NM\_001305  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCCTCCATGGGGCTACAGGTAATGGGCATCGCGCTGGCCGTCTGGGCTGGCTGGCCGTATGCTGT  
 GCTGCGCGCTGCCATGTGGCGGTGACGGCCTTCATCGGCAGCAACATTGTACCTCGCAGACCATCTG  
 GGAGGGCCTATGGATGAAGTGGTGCAGAGCACCGGCCAGATGCAGTGAAGGTGTACGACTCGCTG  
 CTGGCACTGCCGAGGACCTGCAGGCGGCCCGCCCTCGTCATCATCAGCATCATCGTGGCTGCTCTGG  
 GCGTGCTGCTCCGTGGTGGGGGCAAGTGTACCAACTGCCTGGAGGATGAAAGCGCCAAGGCCAAGAC  
 CATGATCGTGGCGGGCGTGGTGTTCCTGTTGGCCGGCCTTATGGTGATAGTCCGGGTGTCCTGGACGGCC  
 CACAACATCATCAAGACTTCTACAATCCGCTGGTGGCCTCCGGGCAGAAGCGGGAGATGGGTGCCTCGC  
 TCTACGTCGGCTGGGCCGCTCCGGCCTGCTGCTCCTTGGCGGGGGCTGCTTTGCTGCAACTGTCCACC  
 CCGCACAGACAAGCCTTACTCCGCCAAGTATTCTGCTGCCCGCTCTGCTGCTGCCAGCAACTACGTG

**ACGCGTACGCGGGCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG200490 representing NM\_001305  
 Red=Cloning site Green=Tags(s)

MASMGQLQVMGIALAVLGLAVMLCCALPMWRVTAFIGSNIIVTSQTIWEGLMNCVVQSTGQMCKVYDSL  
 LALPQDLQAARALVIIISIIVAALGVLLSVVGGKCTNLEDESAAKAKTMIVAGVVFLLAGLMVIVPVSUTA  
 HNI IQDFYNPLVASGQKREMGASLYVGWAASGLLLLGGLLCCNCPRTDKPYSAKYSAARSAAASNYV

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_001305

**ORF Size:** 627 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](mailto: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\\_001305.5](#)

RefSeq Size:	1846 bp
RefSeq ORF:	630 bp
Locus ID:	1364
UniProt ID:	<a href="#">O14493</a>
Cytogenetics:	7q11.23
Domains:	PMP22_Claudin
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction
Gene Summary:	The protein encoded by this intronless gene belongs to the claudin family. Claudins are integral membrane proteins that are components of the epithelial cell tight junctions, which regulate movement of solutes and ions through the paracellular space. This protein is a high-affinity receptor for Clostridium perfringens enterotoxin (CPE) and may play a role in internal organ development and function during pre- and postnatal life. This gene is deleted in Williams-Beuren syndrome, a neurodevelopmental disorder affecting multiple systems. [provided by RefSeq, Sep 2013]

**Product images:**



Circular map for RG200490