

Product datasheet for **RG228137**

Claudin 10 (CLDN10) (NM_001160100) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Claudin 10 (CLDN10) (NM_001160100) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: CLDN10
Synonyms: CPETRL3; HELIX; OSP-L; OSPL
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG228137 representing NM_001160100
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCAGGGCGCAGATCTGGCTCTGGTGTCTGGTGTCTGGAGGGTTGGAGCTCTCGTTGCTGCTACCA
CGTCCAATGAGTGGAAAGTGACCACGCGAGCCTCCTCGGTGATAACAGCCACTTGGGTTTACCAGGGTCT
GTGGATGAAGTGCAGGTTATATACAGGCATGTAGAGGACTTATGATCGCTGCTGTCAGCCTGGGCTTC
TTTGGTCCATATTTGCGCTCTTTGGAATGAAGTGTACCAAAGTCGGAGGCTCCGATAAAGCCAAAGCTA
AAATTGCTTGTGGCTGGGATTGTATTCACTGTCTAGGCTGTCTCAATGACTGGATGTTCCCTATA
TGCAAACAAAATCACAACGGAATCTTTGATCCTCTCTTTGTTGAGCAAAGTATGAATTAGGAGCCGCT
CTGTTTATTGGATGGCAGGAGCCTCACTGTGCATAATTGGTGGTGTATATTTGCTTTCAATATCTG
ACAACAACAAAACACCCAGATACACATAACAACGGGCCACATCTGTCTGCTCTTCTCGGACAAAAGTATCA
TGGTGGAGAAGATTTTAAACAACAAACCCCTTCAAACAGTTTGATAAAAATGCTTATGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG228137 representing NM_001160100
Red=Cloning site Green=Tags(s)

MSRAQI WALVSGVGGFGALVAATTSNEWKVTRASSVITATWVYQGLWMNCAGYIQACRGLMIAAVSLGF
FGSIFALFGMKCTKVGSDKAKAKIACLAGIVFILSGLCSMTGCSLYANKITTEFFDPLFVEQKYELGAA
LFIGWAGASLCIIGGVIFCFISISDNKTPRYTYNGATSVMSRRTKYHGGEDFKTTNPSKQFDKNAYV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

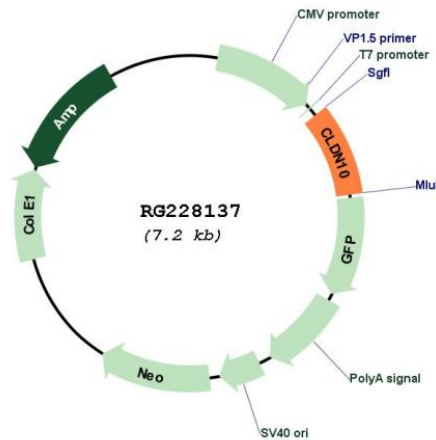


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001160100

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_001160100.1](#), [NP_001153572.1](#)

RefSeq Size: 2601 bp

RefSeq ORF: 624 bp

Locus ID: 9071

UniProt ID: [P78369](#)

Cytogenetics: 13q32.1

Protein Families: Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Tight junction

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 expression level of this gene is associated with recurrence of primary hepatocellular carcinoma. Six alternatively spliced transcript variants encoding different isoforms have been reported, but the transcript sequences of some variants are not determined.[provided by RefSeq, Jun 2010]