

Product datasheet for **RG221281**

Claudin 10 (CLDN10) (NM_182848) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 10 (CLDN10) (NM_182848) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Claudin 10
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:	>RG221281 representing NM_182848 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCAGGGCGCAGATCTGGGCTCTGGTGTCTGGTGTCTGGAGGGTTGGAGCTCTCGTTGCTGCTACCA
CGTCCAATGAGTGGAAAGTGACCACGCGAGCCTCCTCGGTGATAACAGCCACTTGGGTTTACCAGGGTCT
GTGGATGAACTGCGCAGGTAACGCGTTGGGTTCTTCCATTGCCGACCGATTTTACTATCTTCAAAGTA
GCAGGTTATATACAGGCATGTAGAGGACTTATGATCGCTGCTGCAGCCTGGGCTTCTTTGGTTCCATAT
TTGCGCTCTTTGGAATGAAGTGTACCAAAGTCGGAGGCTCCGATAAAGCCAAAGCTAAAATTGCTTGTTT
GGCTGGGATTGTATTCATCTGTCAGGGCTGTGCTCAATGACTGGATGTTCCCTATATGCAAACAAAATC
ACAACGGAATCTTTGATCCTCTCTTTGTTGAGCAAAAGTATGAATTAGGAGCCGCTCTGTTTATTGGAT
GGGAGGAGCCTCACTGTGCATAATTGGTGGTGTGCATATTTGCTTTTCAATATCTGACAACAACAAAAC
ACCCAGATACACATACAACGGGGCCACATCTGTGCATGTCTTCTCGGACAAAGTATCATGGTGGAGAAGAT
TTAAAACAACAAACCCTTCAAACAGTTTGATAAAAATGCTTATGTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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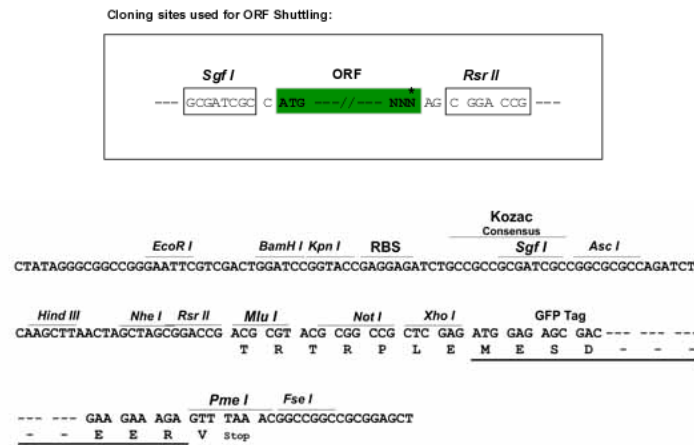
Protein Sequence: >RG221281 representing NM_182848
Red=Cloning site Green=Tags(s)

MSRAQIWALVSGVGGFGALVAATTSNEWKVTRASSVITATWVYQGLWMNCAGNALGSFHCRPHFTIFKV
 AGYIQACRGLMIAAVSLGFFGSIFALFGMKCTKVGGSDKAKAKIACLAGIVFILSGLCSMTGCSLYANKI
 TTEFFDPLFVEQKYELGAALFIGWAGASLCIIGGVIFCF SISDNNKTPRYTYNGATSVMSRRTKYHGGED
 FKTTNPSKQFDKNAYV

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_182848

ORF Size: 678 bp

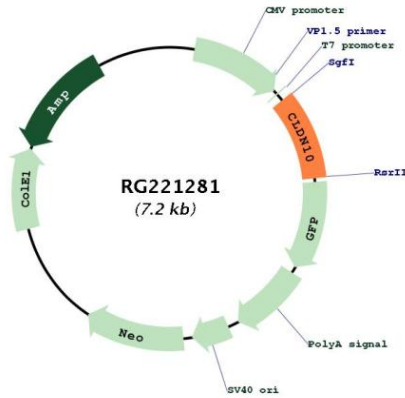
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	<ol style="list-style-type: none">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_182848.3 , NP_878268.1
RefSeq Size:	2658 bp
RefSeq ORF:	681 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]

Product images:



Circular map for RG221281