

## Product datasheet for **SC307522**

### Claudin 10 (CLDN10) (NM\_182848) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Claudin 10 (CLDN10) (NM_182848) Human Untagged Clone
Tag:	Tag Free
Symbol:	CLDN10
Synonyms:	CPETRL3; HELIX; OSP-L; OSPL
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_182848, the custom clone sequence may differ by one or more nucleotides ATGTCCAGGGCGCAGATCTGGGCTCTGGTGTCTGGTGTCTGGAGGGTTGGAGCTCTCGTT GCTGCTACCACGTCCAATGAGTGGAAAGTGACCACGCGAGCCTCCTCGGTGATAACAGCC ACTTGGGTTTACCAGGTCTGTGGATGAACTGCGCAGGTAACGCGTTGGGTTCTTTCCAT TGCCGACCGCATTTTACTATCTTCAAAGTAGCAGGTTATACAGGCATGTAGAGGACTT ATGATCGCTGCTGTCAGCCTGGGCTTCTTTGGTCCATATTTGCGCTCTTTGGAATGAAG TGTACCAAAGTCGGAGGCTCCGATAAAGCCAAAGCTAAAATTGCTTGTTGGCTGGGATT GTATTCATACTGTCAGGGCTGTGCTCAATGACTGGATGTTCCCTATATGCAAACAAAATC ACAACGGAATTCTTTGATCCTCTCTTTGTTGAGCAAAAGTATGAATTAGGAGCCGCTCTG TTTATTGGATGGGACAGGAGCCTCACTGTGCATAATTGGTGGTGTGCATATTTTGTCTTTCA ATATCTGACAACAACAAAACACCCAGATACACATAACAACGGGGCCACATCTGTCATGTCT TCTCGGACAAAGTATCATGGTGGAGAAGATTTTAAAACAACAACCCCTTCAAACAGTTT GATAAAAATGCTTATGTCTAA
Restriction Sites:	Please inquire
ACCN:	NM_182848



[View online »](#)

**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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_182848.2](#), [NP\\_878268.1](#)

**RefSeq Size:** 2549 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]

Transcript Variant: This variant (a) represents the longest transcript and encodes isoform a.