

# **Product datasheet for SC327406**

#### OriGene Technologies, Inc.

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## Claudin 14 (CLDN14) (NM\_001146079) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Claudin 14 (CLDN14) (NM\_001146079) Human Untagged Clone

Tag: Tag Free

Symbol: Claudin 14

Synonyms: DFNB29

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

**E. coli Selection:** Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001146079, the custom clone sequence may differ by one or

more nucleotides

**Restriction Sites:** Please inquire **ACCN:** NM 001146079

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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.



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**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: <u>NM 001146079.1</u>, <u>NP 001139551.1</u>

 RefSeq Size:
 1768 bp

 RefSeq ORF:
 720 bp

 Locus ID:
 23562

 UniProt ID:
 095500

 Cytogenetics:
 21q22.13

**Protein Families:** Druggable Genome, Transmembrane

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

**Gene Summary:** Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell

sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. The protein encoded by this gene, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. The encoded protein also binds

specifically to the WW domain of Yes-associated protein. Defects in this gene are the cause of an autosomal recessive form of nonsyndromic sensorineural deafness. It is also reported that four synonymous variants in this gene are associated with kidney stones and reduced bone mineral density. Several transcript variants encoding the same protein have been found for

this gene. [provided by RefSeq, Jun 2010]

Transcript Variant: This variant (beta) differs in the 5' UTR compared to variant 1. All five

variants encode the same protein.