

Product datasheet for SC329412

OriGene Technologies, Inc.

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Claudin 12 (CLDN12) (NM_001185072) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Claudin 12 (CLDN12) (NM_001185072) Human Untagged Clone

Tag: Tag Free
Symbol: Claudin 12

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC329412 representing NM_001185072.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

TCTGCCATTGAAATTGACATTCCAGTAGTTTCACACACCACTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001185072

Insert Size: 735 bp

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).

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.

RefSeg: NM 001185072.2

 RefSeq Size:
 3684 bp

 RefSeq ORF:
 735 bp

 Locus ID:
 9069

 UniProt ID:
 P56749

 Cytogenetics:
 7q21.13

Protein Families: Transmembrane

MW: 27.1 kDa

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. This gene is expressed in the inner ear and bladder epithelium, and it is over-expressed in colorectal carcinomas. This protein and claudin 2 are critical for vitamin D-dependent Ca2+ absorption between enterocytes. Multiple alternatively spliced transcript variants encoding the same protein have been found.[provided by RefSeq, Sep 2011] Transcript Variant: This variant (1) is the longest transcript. Variants 1-3 encode the same

protein.