

## Product datasheet for RC203922L2

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## TMEM24 (C2CD2L) (NM\_014807) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: TMEM24 (C2CD2L) (NM\_014807) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: TMEM24

Synonyms: DLNB23; TMEM24

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203922).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

**ACCN:** NM\_014807

ORF Size: 2118 bp





#### TMEM24 (C2CD2L) (NM\_014807) Human Tagged Lenti ORF Clone - RC203922L2

**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:** <u>NM 014807.3</u>

RefSeq Size: 3402 bp
RefSeq ORF: 2124 bp
Locus ID: 9854

UniProt ID: <u>O14523</u> Cytogenetics: 11q23.3

**Protein Families:** Transmembrane

**MW:** 76.2 kDa

**Gene Summary:** Lipid-binding protein that transports phosphatidylinositol, the precursor of

phosphatidylinositol 4,5-bisphosphate (PI(4,5)P2), from its site of synthesis in the

endoplasmic reticulum to the cell membrane (PubMed:28209843). It thereby maintains the pool of cell membrane phosphoinositides, which are degraded during phospholipase C (PLC)

signaling (PubMed:28209843). Plays a key role in the coordination of Ca(2+) and

phosphoinositide signaling: localizes to sites of contact between the endoplasmic reticulum and the cell membrane, where it tethers the two bilayers (PubMed:28209843). In response to elevation of cytosolic Ca(2+), it is phosphorylated at its C-terminus and dissociates from the

cell membrane, abolishing phosphatidylinositol transport to the cell membrane (PubMed:28209843). Positively regulates insulin secretion in response to glucose:

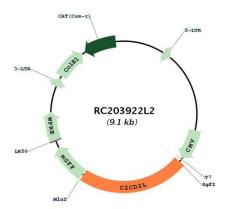
phosphatidylinositol transfer to the cell membrane allows replenishment of PI(4,5)P2 pools

and calcium channel opening, priming a new population of insulin granules

(PubMed:28209843).[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for RC203922L2