

# **Product datasheet for SC324859**

## TMX2 (NM 001144012) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: TMX2 (NM\_001144012) Human Untagged Clone

Tag: Tag Free Symbol: TMX2

Synonyms: CGI-31; NEDMCMS; PDIA12; PIG26; TXNDC14

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC324859 representing NM\_001144012.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

AACAAGAAGGATAAATAA
ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul



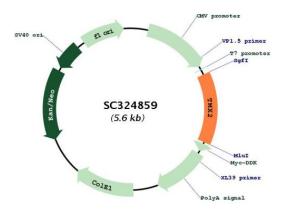
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



#### Plasmid Map:



**ACCN:** NM\_001144012

**Insert Size:** 777 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).

**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: <u>NM 001144012.2</u>

RefSeq Size: 1627 bp



### TMX2 (NM\_001144012) Human Untagged Clone - SC324859

 RefSeq ORF:
 777 bp

 Locus ID:
 51075

 UniProt ID:
 Q9Y320

 Cytogenetics:
 11q12.1

**Protein Families:** Druggable Genome, Transmembrane

MW: 29.6 kDa

**Gene Summary:** This gene encodes a member of the disulfide isomerase (PDI) family of endoplasmic

reticulum (ER) proteins that catalyze protein folding and thiol-disulfide interchange reactions. The encoded protein has an N-terminal ER-signal sequence, a catalytically active thioredoxin domain, one transmembrane domain and a C-terminal ER-retention sequence. This protein is enriched on the mitochondria-associated-membrane of the ER via palmitoylation of two of its

cytosolically exposed cysteines. [provided by RefSeq, Jan 2017]

Transcript Variant: This variant (2) lacks an alternate in-frame exon and uses an alternate in-frame splice junction compared to variant 5. The resulting isoform (2) has the same N- and C-

termini but is shorter compared to isoform 4.