

## Product datasheet for RR200766L4

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## Tspan12 (NM\_001015026) Rat Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Tspan12 (NM\_001015026) Rat Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Tspan12

Synonyms: Tm4sf12

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

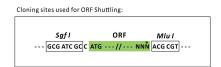
E. coli Selection: Chloramphenicol (34 ug/mL)

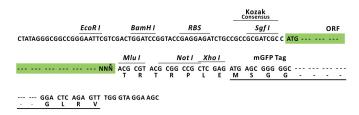
ORF Nucleotide The ORF insert of this clone is exactly the same as(RR200766).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 



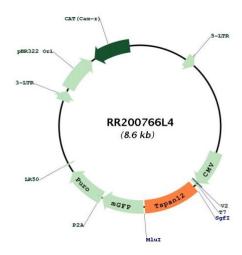


<sup>\*</sup> The last codon before the Stop codon of the ORF.





#### Plasmid Map:



**ACCN:** NM\_001015026

ORF Size: 915 bp

**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 001015026.1</u>, <u>NP 001015026.1</u>

**RefSeq Size:** 2563 bp **RefSeq ORF:** 918 bp



### Tspan12 (NM\_001015026) Rat Tagged Lenti ORF Clone - RR200766L4

 Locus ID:
 362326

 UniProt ID:
 Q569A2

 Cytogenetics:
 4q22

**Gene Summary:** Regulator of cell surface receptor signal transduction. Plays a central role in retinal

vascularization by regulating norrin (NDP) signal transduction. Acts in concert with norrin (NDP) to promote FZD4 multimerization and subsequent activation of FZD4, leading to promote accumulation of beta-catenin (CTNNB1) and stimulate LEF/TCF-mediated

transcriptional programs. Suprisingly, it only activate the norrin (NDP)-dependent activation of

FZD4, while it does not activate the Wnt-dependent activation of FZD4, suggesting the existence of a Wnt-independent signaling that also promote accumulation the beta-catenin (CTNNB1). Acts as a regulator of membrane proteinases such as ADAM10 and MMP14/MT1-MMP. Activates ADAM10-dependent cleavage activity of amyloid precursor protein (APP). Activates MMP14/MT1-MMP-dependent cleavage activity (By similarity).[UniProtKB/Swiss-Prot

Function]