

# Product datasheet for RC223613L3

### OriGene Technologies, Inc.

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## Presenilin 2 (PSEN2) (NM 000447) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Presenilin 2 (PSEN2) (NM 000447) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Presenilin 2

Synonyms: AD3L; AD4; CMD1V; PS2; STM2

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC223613).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 



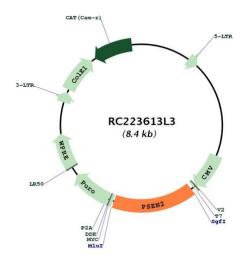


<sup>\*</sup> The last codon before the Stop codon of the ORF.





#### Plasmid Map:



**ACCN:** NM\_000447 **ORF Size:** 1344 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 000447.1</u>

RefSeq Size: 2236 bp RefSeq ORF: 1347 bp



### Presenilin 2 (PSEN2) (NM\_000447) Human Tagged Lenti ORF Clone - RC223613L3

 Locus ID:
 5664

 UniProt ID:
 P49810

 Cytogenetics:
 1q42.13

**Domains:** Presenilin, PSN

Protein Families: Druggable Genome, Protease, Transmembrane
Protein Pathways: Alzheimer's disease, Notch signaling pathway

**MW:** 50 kDa

**Gene Summary:** Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the

presenilin proteins (PSEN1 or PSEN2) or the amyloid precursor protein (APP). These disease-linked mutations result in increased production of the longer form of amyloid-beta (main component of amyloid deposits found in AD brains). Presenilins are postulated to regulate APP processing through their effects on gamma-secretase, an enzyme that cleaves APP. Also, it is thought that the presenilins are involved in the cleavage of the Notch receptor such that, they either directly regulate gamma-secretase activity, or themselves act are protease enzymes. Two alternatively spliced transcript variants encoding different isoforms of PSEN2

have been identified. [provided by RefSeq, Jul 2008]