

# Product datasheet for MR207460L4V

### 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

## Psen1 (NM\_008943) Mouse Tagged ORF Clone Lentiviral Particle

#### **Product data:**

**Product Type:** Lentiviral Particles

Product Name: Psen1 (NM 008943) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Psen1

**Synonyms:** Ad3h; PS-1; PS1; S182

**Mammalian Cell** 

Selection:

Puromycin

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_008943 **ORF Size:** 1404 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR207460).

Sequence:

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.

**RefSeq:** <u>NM 008943.2</u>, <u>NP 032969.1</u>

 RefSeq Size:
 3023 bp

 RefSeq ORF:
 1404 bp

 Locus ID:
 19164

 UniProt ID:
 P49769

Cytogenetics: 12 38.84 cM





#### **Gene Summary:**

Catalytic subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (amyloid-beta precursor protein). Requires the presence of the other members of the gamma-secretase complex for protease activity (By similarity). Plays a role in Notch and Wnt signaling cascades and regulation of downstream processes via its role in processing key regulatory proteins, and by regulating cytosolic CTNNB1 levels (PubMed:10421573, PubMed:11517342). Stimulates cell-cell adhesion via its interaction with CDH1; this stabilizes the complexes between CDH1 (E-cadherin) and its interaction partners CTNNB1 (betacatenin), CTNND1 and JUP (gamma-catenin) (PubMed:11226248). Under conditions of apoptosis or calcium influx, cleaves CDH1 (PubMed:11953314). This promotes the disassembly of the complexes between CDH1 and CTNND1, JUP and CTNNB1, increases the pool of cytoplasmic CTNNB1, and thereby negatively regulates Wnt signaling (PubMed:11226248). Required for normal embryonic brain and skeleton development, and for normal angiogenesis (PubMed:9160754, PubMed:10421573, PubMed:12834865). Mediates the proteolytic cleavage of EphB2/CTF1 into EphB2/CTF2 (PubMed:17428795). The holoprotein functions as a calcium-leak channel that allows the passive movement of calcium from endoplasmic reticulum to cytosol and is involved in calcium homeostasis (PubMed:16959576). Involved in the regulation of neurite outgrowth (By similarity). Is a regulator of presynaptic facilitation, spike transmission and synaptic vesicles replenishment in a process that depends on gamma-secretase activity. It acts through the control of SYT7 presynaptic expression (PubMed:30429473).[UniProtKB/Swiss-Prot Function]