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

Product datasheet for SC125532

Presenilin 1 (PSEN1) (NM_000021) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Presenilin 1 (PSEN1) (NM_000021) Human Untagged Clone
Tag:	Tag Free
Symbol:	Presenilin 1
Synonyms:	ACNINV3; AD3; FAD; PS-1; PS1; S182
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF within SC125532 sequence for NM_000021 edited (data generated by NextGen Sequencing)

ATGACAGAGTTACCTGCACCGTTGTCCTACTTCCAGAATGCACAGATGTCTGAGGACAAC
CACCTGAGCAATACTGTACGTAGCCAGAATGACAATAGAGAACGGCAGGAGCACAACGAC
AGACGGAGCCTTGGCCACCCTGAGCCATTATCTAATGGACGACCCCAGGGTAACTCCCGG
CAGGTGGTGGAGCAAGATGAGGAAGAAGATGAGGAGCTGACATTGAAATATGGCGCCAAG
CATGTGATCATGCTCTTTGTCCCTGTGACTCTCTGCATGGTGGTGGTCGTGGCTACCATT
AAGTCAGTCAGCTTTTATACCCGGAAGGATGGGCAGCTAATCTATACCCCATTCACAGAA
GATACCGAGACTGTGGGCCAGAGAGCCCTGCACTCAATTCTGAATGCTGCCATCATGATC
AGTGTCATTGTTGTCATGACTATCCTCCTGGTGGTTCTGTATAAATACAGGTGCTATAAG
GTCATCCATGCCTGGCTTATTATATCATCTCTATTGTTGCTGTTCTTTTTTTCATTCATT
TACTTGGGGGAAGTGTTTAAAACCTATAACGTTGCTGTGGACTACATTACTGTTGCACTC
CTGATCTGGAATTTTGGTGTGGTGGGAATGATTTCCATTCACTGGAAAGGTCCACTTCGA
CTCCAGCAGGCATATCTCATTATGATTAGTGCCCTCATGGCCCTGGTGTTTATCAAGTAC
CTCCCTGAATGGACTGCGTGGCTCATCTTGGCTGTGATTTCAGTATATGATTTAGTGGCT
GTTTTGTGTCCGAAAGGTCCACTTCGTATGCTGGTTGAAACAGCTCAGGAGAGAAATGAA
ACGCTTTTTCCAGCTCTCATTTACTCCTCAACAATGGTGTGGTTGGTGAATATGGCAGAA
GGAGACCCGGAAGCTCAAAGGAGAGTATCCAAAAATTCCAAGTATAATGCAGAAAGCACA
GAAAGGGAGTCACAAGACACTGTTGCAGAGAATGATGATGGCGGGTTCAGTGAGGAATGG
GAAGCCCAGAGGGACAGTCATCTAGGGCCTCATCGCTCTACACCTGAGTCACGAGCTGCT
GTCCAGGAACTTTCCAGCAGTATCCTCGCTGGTGAAGACCCAGAGGAAAGGGGAGTAAAA
CTTGGATTGGGAGATTTCATTTTCTACAGTGTTCTGGTTGGTAAAGCCTCAGCAACAGCC
AGTGGAGACTGGAACACAACCATAGCCTGTTTCGTAGCCATATTAATTGGTTTGTGCCTT
ACATTATTACTCCTTGCCATTTTCAAGAAAGCATTGCCAGCTCTTCCAATCTCCATCACC
TTTGGGCTTGTTTTCTACTTTGCCACAGATTATCTTGTACAGCCTTTTATGGACCAATTA
GCATTCCATCAATTTTATATCTAG

Clone variation with respect to NM_000021.3

Restriction Sites: NotI-NotI

ACCN: NM_000021

Insert Size: 1404 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: A TrueClone.

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:	NM_000021.2, NP_000012.1
RefSeq Size:	2763 bp
RefSeq ORF:	1404 bp
Locus ID:	5663
UniProt ID:	P49768
Cytogenetics:	14q24.2
Domains:	Presenilin, PSN
Protein Families:	Druggable Genome, Protease, Transmembrane
Protein Pathways:	Alzheimer's disease, Neurotrophin signaling pathway, Notch signaling pathway, Wnt signaling pathway
Gene Summary:	Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the presenilin proteins (PSEN1; PSEN2) or in 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 are protease enzymes. Several alternatively spliced transcript variants encoding different isoforms have been identified for this gene, the full-length nature of only some have been determined. [provided by RefSeq, Aug 2008] Transcript Variant: This variant (1) encodes the longer isoform (I-467).