

Product datasheet for TL320496

OriGene Technologies, Inc.

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Presenilin 1 (PSEN1) Human shRNA Plasmid Kit (Locus ID 5663)

Product data:

Product Type: shRNA Plasmids

Product Name: Presenilin 1 (PSEN1) Human shRNA Plasmid Kit (Locus ID 5663)

Locus ID: 5663

Synonyms: ACNINV3; AD3; FAD; PS-1; PS1; S182

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: PSEN1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5663).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 000021, NM 007318, NM 007319, NM 000021.1, NM 000021.2, NM 000021.3,

NM 007318.1, NM 007318.2, BC011729, BC002708, NM 000021.4, NM 007318.3

UniProt ID: P49768

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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).