

## **Product datasheet for TL320264**

## 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

## **Amyloid Precursor Protein (APP) Human shRNA Plasmid Kit (Locus ID 351)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Amyloid Precursor Protein (APP) Human shRNA Plasmid Kit (Locus ID 351)

Locus ID: 351

Synonyms: AAA; ABETA; ABPP; AD1; alpha-sAPP; APPI; CTFgamma; CVAP; PN-II; PN2; preA4

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

II

Puromycin

Selection: Format:

Lentiviral plasmids

Components: APP - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 351). 5µg

purified plasmid DNA per construct

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

RefSeq: NM 000484, NM 001136016, NM 001136129, NM 001136130, NM 001136131,

NM 001204301, NM 001204302, NM 001204303, NM 201413, NM 201414, NM 201413.1, NM 201413.2, NM 201414.1, NM 201414.2, NM 000484.1, NM 000484.2, NM 000484.3, NM 001136016.1, NM 001136016.2, NM 001136016.3, NM 001136129.1, NM 001136129.2, NM 001136130.1, NM 001136130.2, NM 001136131.1, NM 001136131.2, NM 001204303.1,

NM 001204302.1, NM 001204301.1, BC065529, BC065529.1, BC004369, BC065523,

BM172428, BM876312, NM 001204303.2, NM 001204302.2, NM 201413.3, NM 001136130.3,

NM 201414.3, NM 000484.4, NM 001136129.3, NM 001204301.2

UniProt ID: P05067

**Summary:** This gene encodes a cell surface receptor and transmembrane precursor protein that is

cleaved by secretases to form a number of peptides. Some of these peptides are secreted and can bind to the acetyltransferase complex APBB1/TIP60 to promote transcriptional activation, while others form the protein basis of the amyloid plaques found in the brains of patients with Alzheimer disease. In addition, two of the peptides are antimicrobial peptides, having been shown to have bacteriocidal and antifungal activities. Mutations in this gene have been implicated in autosomal dominant Alzheimer disease and cerebroarterial amyloidosis

(cerebral amyloid angiopathy). Multiple transcript variants encoding several different

isoforms have been found for this gene. [provided by RefSeq, Aug 2014]





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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).