

## Product datasheet for **KN209575**

### Amyloid Precursor Protein (APP) Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Amyloid Precursor Protein
Locus ID:	351
Components:	<p><b>KN209575G1</b>, Amyloid Precursor Protein gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGCAGGAGCAGTGCCAAACC</p> <p><b>KN209575G2</b>, Amyloid Precursor Protein gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGCGCCCGAGCCGTCCAGG</p> <p><b>KN209575D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
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 CAACCTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA  
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 TTCAGCTCCG GTTCCCAACG ATC

**GE100003**, scramble sequence in pCas-Guide vector

**Disclaimer:**

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

**RefSeq:**

[NM\\_000484](#), [NM\\_001136016](#), [NM\\_001136129](#), [NM\\_001136130](#), [NM\\_001136131](#),  
[NM\\_001204301](#), [NM\\_001204302](#), [NM\\_001204303](#), [NM\\_201413](#), [NM\\_201414](#)

**UniProt ID:**

[P05067](#)

**Synonyms:**

AAA; ABETA; ABPP; AD1; APPI; CTGamma; CVAP; PN-II; PN2

**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]

**Product images:**

