

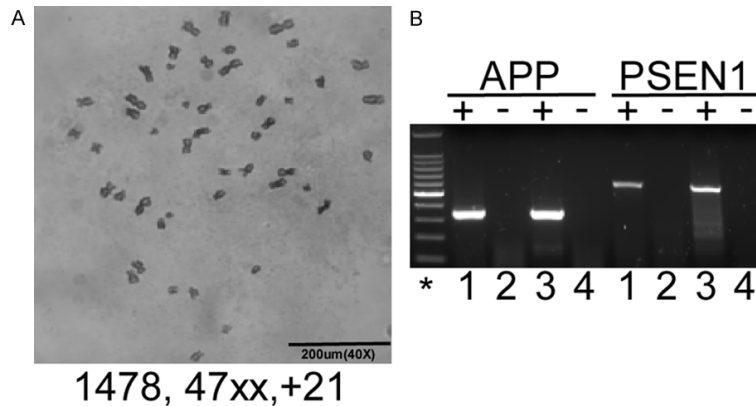
Let-7c, RNA activation and A β production

Supplementary Table 1. Sequences for pSuper plasmid and primers sequences for PCR cloning

Name	Sequence
hsa-let-7c (sense) F1	GATCCCCTGAGGTAGTAGGTTGTATGGTTTTCAAGAGAAACCATACAACCTACTACCTCATTITTTA
hsa-let-7c (antisense) R1	AGCTTAAAAATGAGGTAGTAGGTTGTATGGTTTCTTGTAAAACCATACAACCTACTACCTCAGGG
hsa-mir-99a (sense) F2	GATCCCCAACCCGTAGATCCGATCTTGTGTTCAAGAGACACAAGATCGGATCTACGGGTTTTTTTA
hsa-mir-99a (antisense) R2	AGCTTAAAAAACCCGTAGATCCGATCTTGTGTTCAAGAGACACAAGATCGGATCTACGGGTTGGG
hsa-mir-155 (sense) F3	GATCCCCTTAATGCTAATCGTGATAGGGGTTTCAAGAGAACCCCTATCACGATTAGCATTAAITTTTA
hsa-mir-155 (antisense) R3	AGCTTAAAAATTAATGCTAATCGTGATAGGGGTTTCAAGAGAACCCCTATCACGATTAGCATTAAAGG
siArgonaute1 (sense) F4	GATCCCCATACACACAGGTGCTCATTCAAGAGAAGATGAGACACCTGTGTATGTTTTTA
siArgonaute1 (antisense) R4	AGCTTAAAAACATACACACAGGTGCTCATCTCTTGAATGAGACACCTGTGTATGTTGGG
siArgonaute2 (sense) F5	GATCCCCGGGTAAAGTTTACCAAAGATCAAGAGAAAGATCTTTGGTAAACTTTACCCTTTTTA
siArgonaute2 (antisense) R5	AGCTTAAAAAGGTAAAGTTTACCAAAGATCTTGAATCTTTGGTAAACTTTACCCGGG
siBACE2 (sense) F6	GATCCCCTCGAGTCTGAGAATTTCTTTCAAGAGAAAGAATCTCAGACTCGATTTTTA
siBACE2 (antisense) R6	AGCTTAAAAATCGAGTCTGAGAATTTCTTTCTTGTAAAAGAAATCTCAGACTCGAGGG
siNicastrin (sense) F7	GATCCCCAAGGGCAAGTTTCCCGTGCAGTTTTCAAGAGAACTGCACGGGAAACTTGCCCTTTTTTA
siNicastrin (antisense) R7	AGCTTAAAAAAGGGCAAGTTTCCCGTGCAGTTTTCTTGTAAAAGAACTGCACGGGAAACTTGCCCTTGGG
forward primer F8 for BACE1 3'-UTR	CTAGCTAGCGGAGGCCATGGGCAGAAGA
reverse primer R8 BACE1 3'-UTR	ACGCGTCGACGACTTCTTATTGAATATTTACTG
forward primer F9 for BACE2 3'-UTR	CTAGCTAGCTCTGGTCAGACATCGCTGG
reverse primer R9 BACE2 3'-UTR	ACGCGTCGACTTTTTTCTCATCAAACATG

Supplementary Table 2. Primers sequences for RT-PCR and RT-qPCR

Name	Sequence
pre-let-7c primer forward	GCATCCGGGTTGAGGTAGTAG
pre-let-7c primer reverse	GCTCCAAGGAAAGCTAGAAGG
Argonaute1 primer forward	GACCTCCGCACGGGTATATG
Argonaute1 primer reverse	GGTTTCCCACAGTGCCAAT
Argonaute2 primer forward	TGGTTTGGCTTCCATCAGTCC
Argonaute2 primer reverse	CCTTGTAACGCTGTTGCTGAC
BACE2 primer forward	GCGGGCTACTACCTGGAGATG
BACE2 primer reverse	GTCTATGTGGAGTGCAGGGG
β -Actin primer forward	GACAGGATGCAGAAGGAGATTACT



Supplementary Figure 1. Karyotyping of DS cell line and Gene-type of AD mice. A. Karyotyping of DS cell line MB1478 shown with 47 chromosomes; B. Gene-type of transgenic AD mice (APP^{sw}/PS1^{AE9}) and wild-type mice affirmed by RT-PCR.