

Supplementary Data File 3: Quantitative PCR (qPCR) analysis of relative chromosome abundance

Table S9. PCR primers for qPCR on genomic DNA

Target gene	Chromosome	Primer sequence
<i>rpl13</i>	7	5'-TGAATGGATGAATAGGTTTTTA-3'
		5'-CTCTCTTCTGCCAGTCTTTATGA-3'
<i>psen1</i>	17	5'-CTACACACAGAAGGACGGACAGC-3'
		5'-CCATCCCTAAACTGCTCCTACT-3'
<i>fmr1</i>	14	5'-TCCAGGACCAGGAGGCTGTA-3'
		5'-CCCCTCTTGCCAATGACTTTTC-3'

Results

Table S10. The ratio of relative quantities between chromosomes

		Genotype, Batch number (Note: + denotes wild type <i>fmr1</i> allele, <i>fmr1</i> denotes <i>fmr1</i> ^{hu2787})					
		+/+, 1	+/+, 2	+/+, 3	<i>fmr1</i> / <i>fmr1</i> , 1	<i>fmr1</i> / <i>fmr1</i> , 2	<i>fmr1</i> / <i>fmr1</i> , 3
Ratio	<i>psen1/rpl13</i>	0.97625561	0.985557459	0.98787442	0.844421676	1.01865661	0.919412757
	<i>fmr1/rpl13</i>	1.046886584	0.96111932	0.971418831	0.907239527	1.026082501	1.005627511

Here, the quantities of chromosome 14 (*fmr1*) were normalized by the quantities of chromosome 7 (*rpl13*) (Table S10). The relative quantities, *fmr1/psen1* ratios, are close to 1 in all the samples and do not show any differences between wild-type samples and *fmr1* samples. If there is an extra copy of chromosome 14, it is expected to achieve a *fmr1/psen1* ratio of around 1.5. In conclusion, the quantity of chromosome 14 is the same as for the other chromosomes, so there is no evidence for the existence of additional copies of chromosome 14.

See Supplementary Data File 1 for raw qPCR data.