Figure S1. Genotypic identification of mutant zebrafish via PCR amplification and subsequent electrophoresis. Each pair of two adjacent lanes (from left to right) represents the PCR identification results of one specimen. The first lane indicates the amplification product of the primer pair Mir1-1-11bp wild-type F1/Mir1-1 R, and the second lane represents the amplification product of the primer pair Mir1-1-11bp mutant F1/Mir1-1 R. The results indicated that all specimens were homozygous mutants. F, forward; R, reverse; Mir1, microRNA-1.

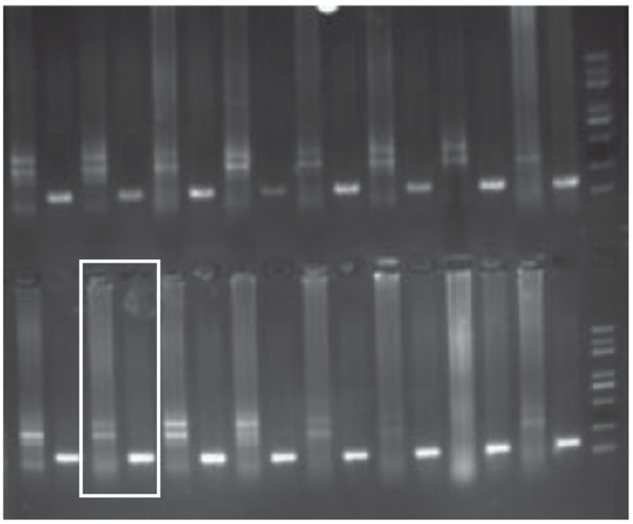

Table SI. Genotype of microRNA-1 knockout mutant in zebrafish.

Target site	Allele	Genomic sequence
Guide RNA 3'	Wild-type	ACAAGAGCAGCTATGGAATGTAAAGAAGT
	Mutant (-11 bp)	ACAAGAGCAG----------AAAGAAGT

Table SII. Primers used in the identification of genotype by PCR.

Name	Sequence (5'→3')
Mir1-1-11bp wild-type F1	CATATGAACAAGAGCAGCT
Mir1-1-11bp mutant F1	CATATGAACAAGAGCAGAA
Mir1-1 R	CTGGCTTATTTGTATTTCAC

F, forward; R, reverse; MIR1/Mir1, microRNA-1.

Table SIII. The sense and antisense probes used in whole mount *in situ* hybridization.

Gene	Sequences(5'→3')
foxd3	F: CAAAGCATGTGTCATCTTG
	R: TGAGAATGTCCGGCTGAT
msxb	F: AAGAAGACTTACCTCCCG
	R: TAAATAGTCCTGGCATCG
snai1b	F: GATGCCACGCTCATTTCTT
	R: GACCCGCACTGGTACTTCTT
tfap2a	F: GGTCACGGCATTGATACTGG
	R: TCGCCTTGGCTGGAAACT
dlx3b	F: AGCGTATCCCACCAAGAC
	R: ATGCGTTCAAACAGTCCA
ngn1	F:CTCACAACTACATCTGGGCACT
	R: GAGGGTTTCTTCGGGTCA

F, forward; R, reverse.