Evolution of fish let-7 microRNAs and their expression correlated to growth development in blunt snout bream

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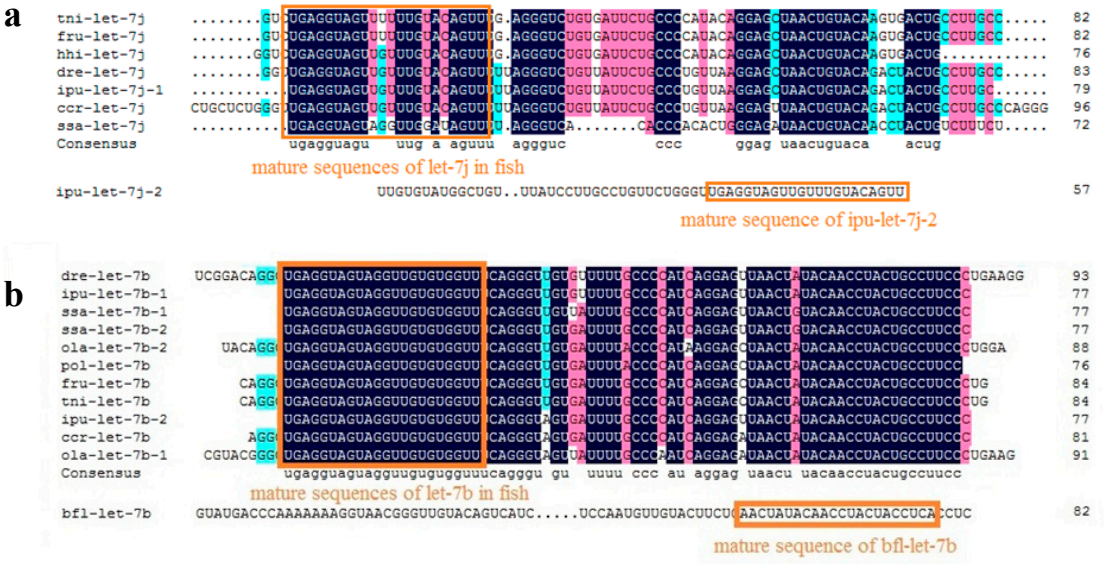

Figure S1. (a) ipu-let-7j-2 conserved sequences were located in 3'arm of precursor sequences. **(b)** bfl-let-7b conserved sequence was the reverse complementary sequence of let-7b sequence of fish species.

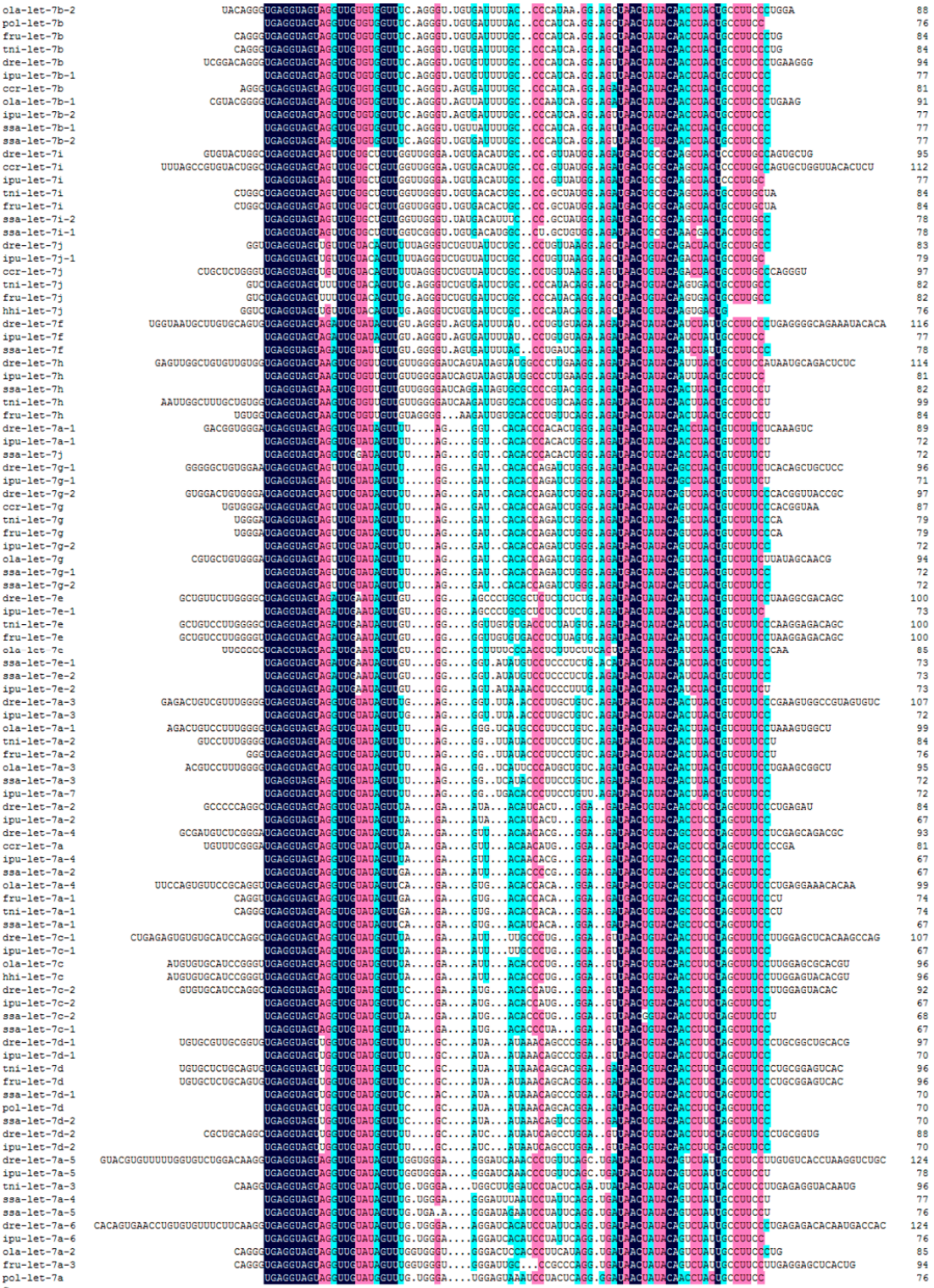

Figure S2. All fish let-7miRNAs have the same seed sequence (GAGGTAG) in 5' arm, and the let-7 miRNAs mature sequences of fish were completely conservative in three regions (TGAGGTAGT, TTG and GTT).

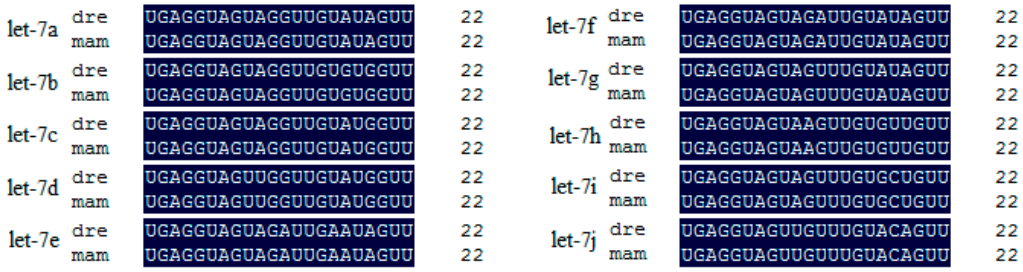

Figure S3. The sequences of let-7 miRNAs in *M. amblycephala* showed the completely consistent mature sequences with zebrafish.

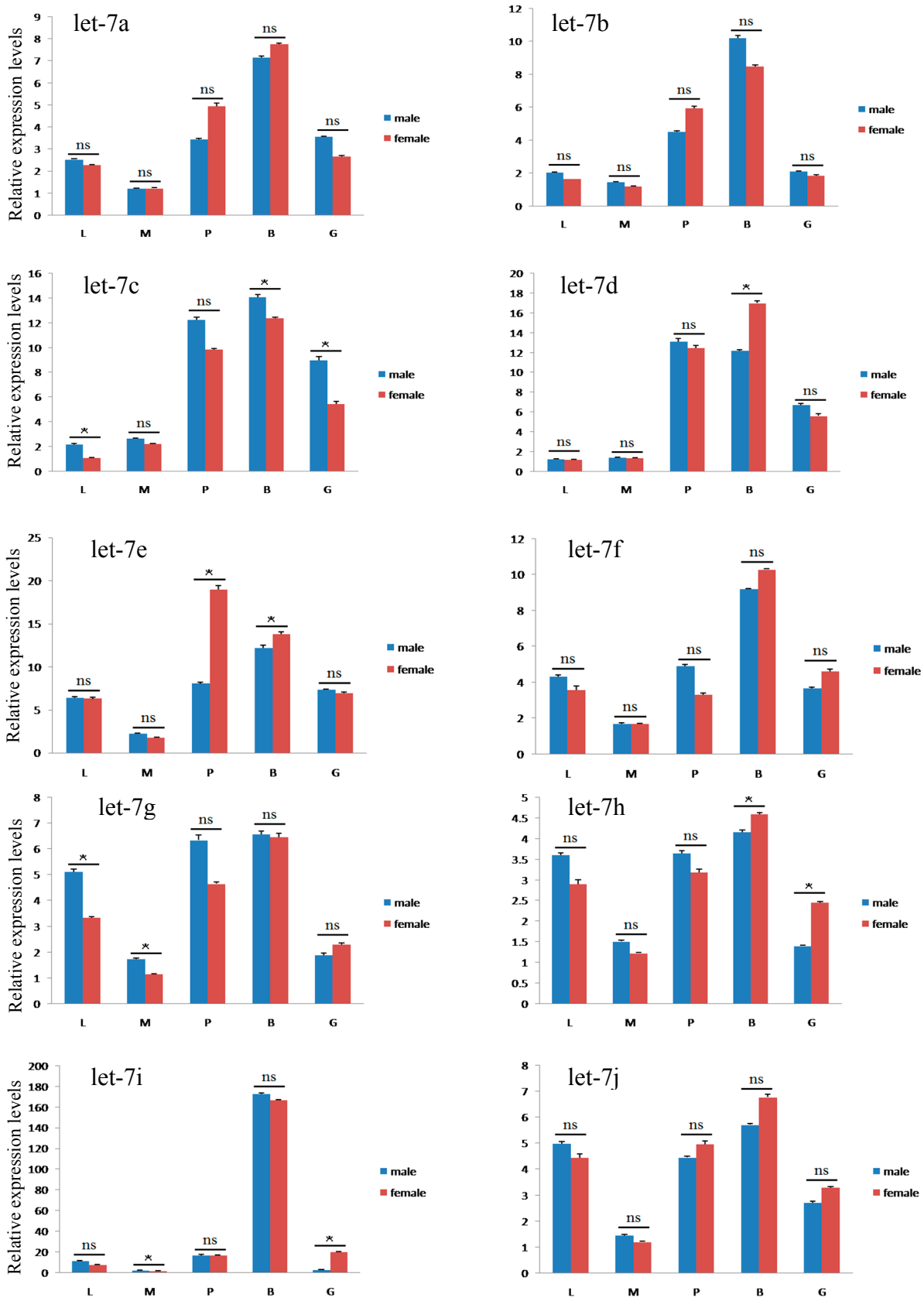

Figure S4. Let-7 miRNAs expression in five tissues of 12-month-old *M. amblycephal.* L, liver; M, muscle; P, pituitary; B, brain; G, gonad. Statistical significances between females and males are indicated as follows: *$P < 0.05$; ns, not significant.

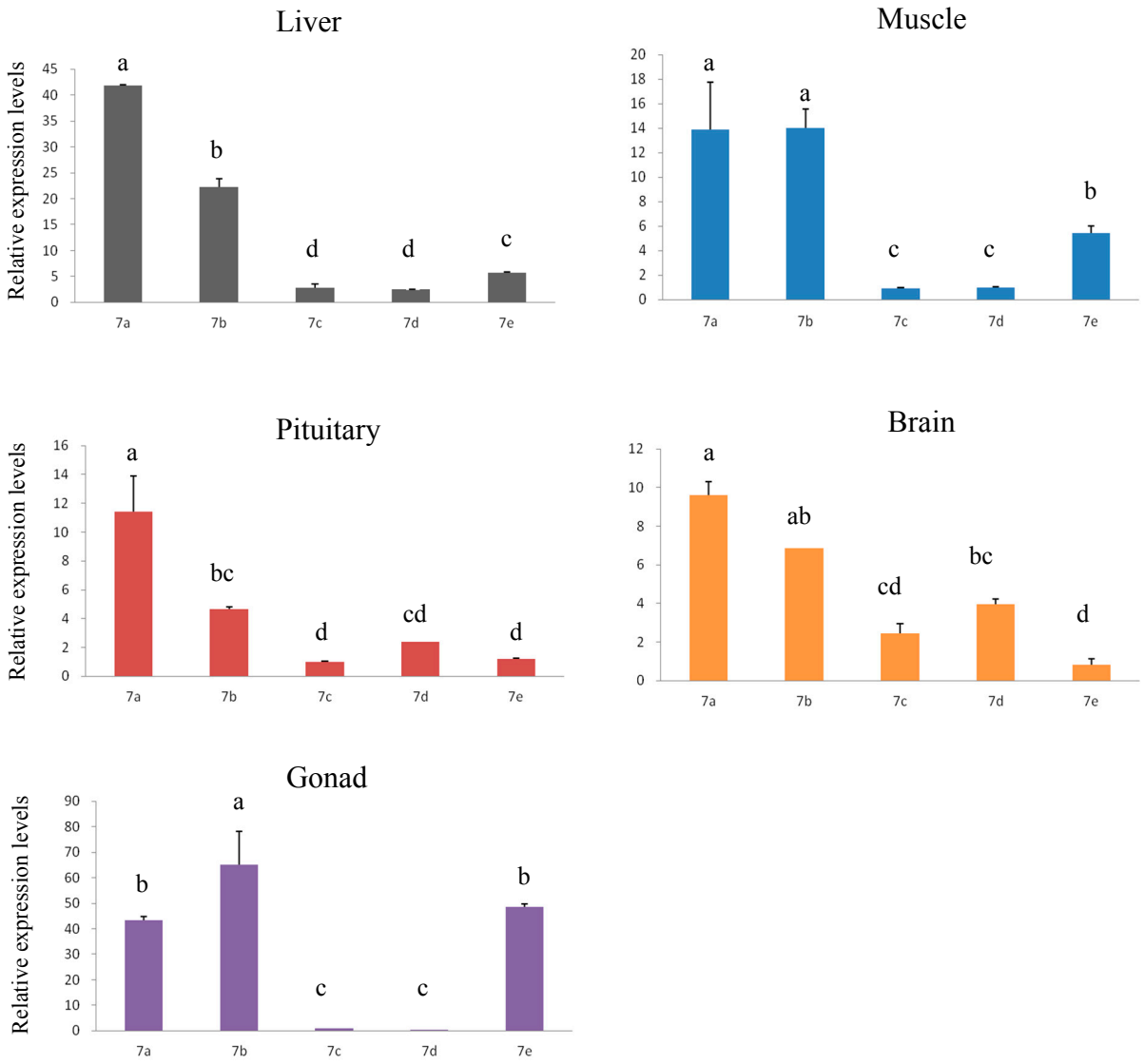

Figure S5. Let-7 miRNAs expression in five tissues of 3-month-old *M. amblycephala*. Values with the same letter mean no significant difference ($P > 0.05$).

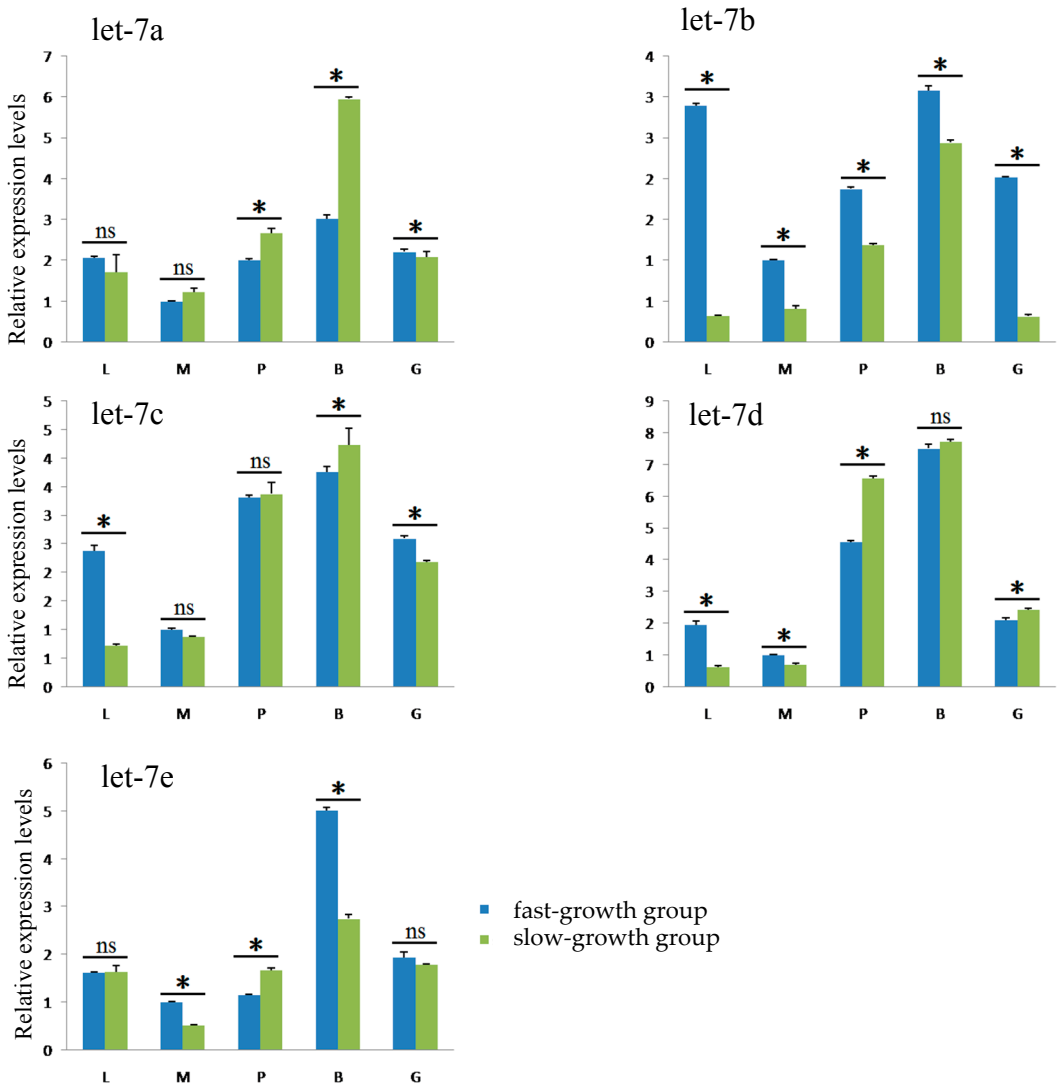

Figure S6. Let-7 miRNAs expression in five tissues of 6-month-old *M. amblycephala*. L, liver; M, muscle; P, pituitary; B, brain; G, gonad. Statistical significances between slow- and fast-growth groups are indicated as follows: *$P < 0.05$; ns, not significant.

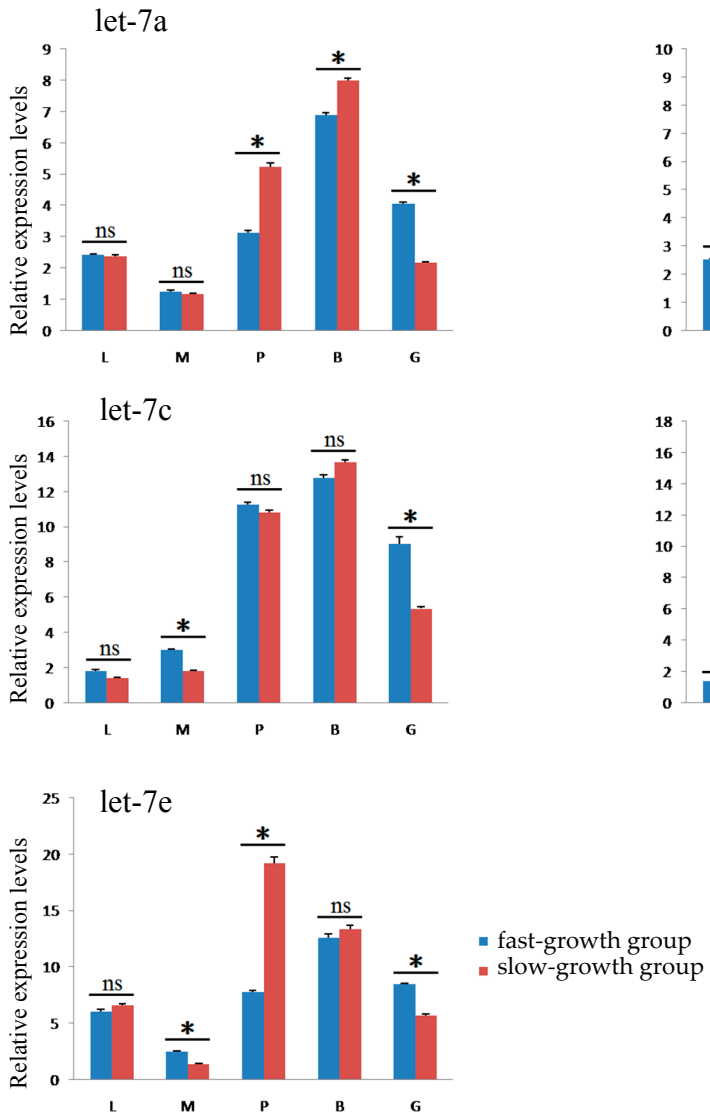

Figure S7. Let-7 miRNAs expression in five tissues of 12-month-old *M. amblycephala*. L, liver; M, muscle; P, pituitary; B, brain; G, gonad. Statistical significances between slow- and fast-growth groups are indicated as follows: *$P < 0.05$; ns, not significant.

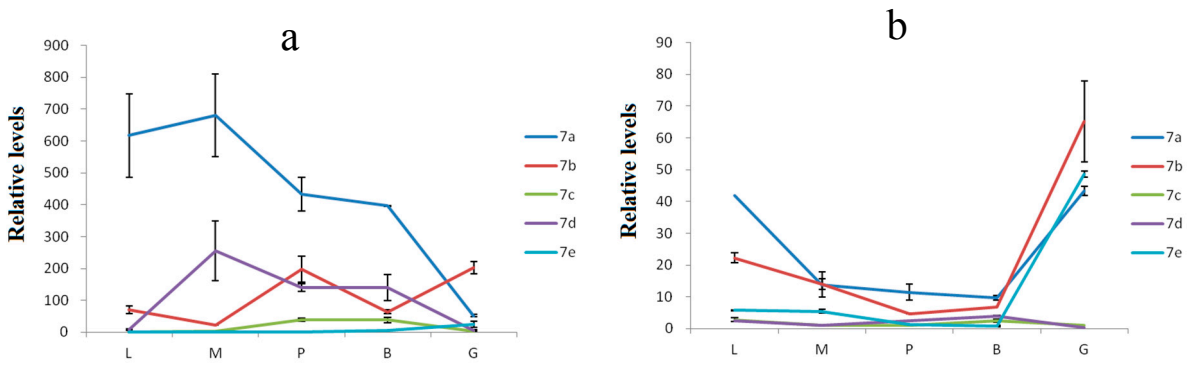

Figure S8. (a) Let-7 miRNAs expression in five tissues of 3-month-old *M. amblycephala* small size group. **(b)** Let-7 miRNAs expression in five tissues of 3-month-old *M. amblycephala* big size group. L, liver; M, muscle; P, pituitary; B, brain; G, gonad.

Table S1. All the let-7 precursor sequences of 12 fish species and 4 out-group species collected from the miRBase

Species	miRNAs	Sequences of precursor
Danio rerio	dre-let-7a-1	GACGGUGGGAUGAGGUAGUAGGUUGUAUAGUUUUAGGGUCACACCCACACUGGGAGAUAACUAUACAACCUACUGUCUUUCUCAAAGUC
	dre-let-7a-2	GCCCCCAGGCUGAGGUAGUAGGUUGUAUAGUUUAGAAUAACAUCACUGGAGAUAACUGUACAACCUCCUAGCUUUCCCUGAGAU
	dre-let-7a-3	GAGACUGUCGUUUGGGGUGAGGUAGUAGGUUGUAUAGUUUGAGGGUUUAACCCUUGCUGUCAGAUAACUAUACAACUUACUGUCUUUCCCGAAGUGGCCGUAGUGUC
	dre-let-7a-4	GCGAUGUCUCGGGAUGAGGUAGUAGGUUGUAUAGUUUAGAGUUACAACACGGGAGAUAACUGUACAGCCUCCUAGCUUUCCUCGAGCAGACGC
	dre-let-7a-5	GUACGUGUUUUUGGUGUCUGGACAAGGUGAGGUAGUAGGUUGUAUAGUUUGGUGGGAGGGAUCAAACCCUGUUCAGCUGAUAACUAUACAGUCUAUUGCCUUCCUUGUGUCACCUAAGGUCUGC
	dre-let-7a-6	CACAGUGAACCUGUGUGUUUCUUCAAGGUGAGGUAGUAGGUUGUAUAGUUUGUGGGAAGGAUCACAUCCUAUUCAGGUGAUAACUAUACAGUCUAUUGCCUUCCCUGAGAGACACAAUGACCACGAGUG
	dre-let-7b	UCGGACAGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUGUUUUUGCCCCAUCAGGAGUUAACUAUACAACCUACUGCCUUCCCUGAAGGG
	dre-let-7c-1	CUGAGAGUGUGUGCAUCCAGGCUGAGGUAGUAGGUUGUAUGGUUUAGAAUUUUGCCCUGGGAGUUAACUGUACAACCUUCUAGCUUUCCUUGGAGCUCACAAGCCAG
	dre-let-7c-2	GUGUGCAUCCAGGCUGAGGUAGUAGGUUGUAUGGUUUCGAAUGACACCAUGGGAGUUAACUGUACAACCUUCUAGCUUUCCUUGGAGUACAC
	dre-let-7d-1	UGUGCGUUGCGGUGUGAGGUAGUUGGUUGUAUGGUUUUGCAUAAUAAACAGCCCGGAGUUAACUGUACAACCUUCUAGCUUUCCCUGCGGCUGCACG
	dre-let-7d-2	CGCUGCAGGCUGAGGUAGUUGGUUGUAUGGUUUUGCAUCAUAAUCAGCCUGGAGUUAACUGUACAACCUUCUAGCUUUCCCUGCGGUG
	dre-let-7e	GCUGUUCUUGGGGCUGAGGUAGUAGAUUGAAUAGUUGUGGAGCCCUGCGCUCUCUCUCUGAGAUAACUAUACAAUCUACUGUCUUUCCUAAGGCGACAGC
	dre-let-7f	UGGUAAUGCUUGUGCAGUGUGAGGUAGUAGAUUGUAUAGUUGUAGGGUAGUGAUUUUAUCCUGUGUAGAAGAUAACUAUACAAUCUAUUGCCUUCCCUGAGGGGCAGAAAUACACA
	dre-let-7g-1	GGGGGCUGUGGAAUGAGGUAGUAGUUUGUAUAGUUUGGGAUCACACCAGAUCUGGGAGAUAACUAUACAGCCUACUGUCUUUCUCACAGCUGCUCC
	dre-let-7g-2	GUGGACUGUGGGAUGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUAACUAUACAGUCUACUGUCUUUCCCACGGUUACCGC
	dre-let-7h	GAGUUGGCUGUGUUGUGGUGAGGUAGUAAGUUGUGUUGUUGUUGGGGAUCAGUAUAGUAUGGCCCUUGAAGGAGAUAACUAUACAAUUUACUGCCUUCCAUAAUGCAGACUCUC
	dre-let-7i	GUGUACUGGCUGAGGUAGUAGUUUGUGCUGUUGGUUGGGAUGUGACAUUGCCCGUUAUGGAGAUGACUGCGCAAGCUACUCCCUUGCCAGUGCUG
	dre-let-7j	GGUUGAGGUAGUUGUUUGUACAGUUUUUAGGGUCUGUUAUUCUGCCCUGUUAAGGAGCUAACUGUACAGACUACUGCCUUGCC

Oryzias latipes	ola-let-7a-1	AGACUGUCCUUUGGGGUGAGGUAGUAGGUUGUAUAGUUUUAGGGGUCAUGCCCUUCCUGUCAGAUAACUAUACAACUUACUGUCUUUCCUAAAGUGGCU
	ola-let-7a-2	CAGGGUGAGGUAGUAGGUUGUAUAGUUUGGUGGGUGGGACUCCACCCUUCAUAGGUGAUAACUAUACAGUCUAUUGCCUUCCCUG
	ola-let-7a-3	ACGUCCUUUGGGGUGAGGUAGUAGGUUGUAUAGUUUUAGGGUCAUUCCCAUGCUGUCAGAUGACUAUACAACUUACUGUCUUUCCUGAAGCGGCU
	ola-let-7a-4	UUCCAGUGUUCCGCAGGUUGAGGUAGUAGGUUGUAUAGUUCAGAGUGACACCACAGGAGAUAACUGUACAGCCUCCUAGCUUUCCCUGAGGAAACACAA
	ola-let-7b-1	CGUACGGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGUAGUUAUUUUGCCCAAUCAGGAGAUAACUAUACAACCUACUGCCUUCCCUGAAG
	ola-let-7b-2	UACAGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUGAUUUUACCCCAUAAGGAGCUAACUAUACAACCUACUGCCUUCCCUGGA
	ola-let-7c	AUGUGUGCAUCCGGGUUGAGGUAGUAGGUUGUAUGGUUUAGAAUUACACCCUGGGAGUUAACUGUACAACCUUCUAGCUUUCCUUGGAGCGCACGU
	ola-let-7e	UUGGGGCUGAGGUAGUAGAUUGAAUAGUUGUGGGGUUUUCCGACCUCUUUCUUCAGUUAACUAUACAAUCUACUGUCUUUCCCAA
	ola-let-7g	CGUGCUGUGGGAUGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUAACUAUACAGUCUACUGUCUUUCUUAUAGCAACG
Fugu rubripes	fru-let-7a-1	CAGGUUGAGGUAGUAGGUUGUAUAGUUGAGAGUGACACCACAGGAGAUGACUGUACAGCCUCCUAGCUUUCCCU
	fru-let-7a-2	GGGUGAGGUAGUAGGUUGUAUAGUUUUAGGGUUAUACCCUUCCUGUCAGAUAACUAUACAACUUACUGUCUUUCCU
	fru-let-7a -3	CAGGGUGAGGUAGUAGGUUGUAUAGUUUGGUGGGUGGGAUUGCCCGCCCAGGUGAUAACUAUACAGUCUAUUGCCUUCCUUGAGGAGCUCACUG
	fru-let-7b	CAGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUGAUUUUGCCCCAUCAGGAGCUAACUAUACAACCUACUGCCUUCCCUG
	fru-let-7d	UGUGCUCUGCAGUGUGAGGUAGUUGGUUGUAUGGUUUCGCAUAAUAAACAGCACGGAGAUAACUGUACAACCUUCUAGCUUUCCCUGCGGAGUCAC
	fru-let-7e	GCUGUCCUUGGGGUUGAGGUAGUAGAUUGAAUAGUUGUGGGGUUGUGUGACCUCUUAGUGAGAUAACUAUACAAUCUACUGUCUUUCCUAAGGAGACAGC
	fru-let-7g	UGGGAUGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUAACUAUACAGUCUACUGUCUUUCCCA
	fru-let-7h	UGUGGUGAGGUAGUAAGUUGUGUUGUUGUAGGGGAAGAUUGUGCACCCUGUUCAGGAGAUAACUAUACAACUUACUGCCUUCCU
	fru-let-7i	CUGGCUGAGGUAGUAGUUUGUGCUGUUGGUUGGGUUGUGACACUGCCCGCUAUGGAGAUGACUGCGCAAGCUACUGCCUUGCUA
	fru-let-7j	GUCUGAGGUAGUUUUUUGUACAGUUUGAGGGUCUGUGAUUCUGCCCCAUACAGGAGCUAACUGUACAAGUGACUGCCUUGCC
	tni-let-7a-1	CAGGGUGAGGUAGUAGGUUGUAUAGUUGAGAGUGACACCACAGGAGAUAACUGUACAGCCUCCUAGCUUUCCCU

Tetraodon nigroviridis	tni-let-7a-2	GUCCUUUGGGGUGAGGUAGUAGGUUGUAUAGUUUUAGGGUUAUACCCUUCCUGUCAGAUAACUAUACAACUUACUGUCUUUCCU
	tni-let-7a-3	CAAGGUGAGGUAGUAGGUUGUAUAGUUUGUGGGAUGGCUUGGAUCCUACUCAGAUUAUAACUAUACAGUCUAUUACCUUCCUUGAGAGGUACAAUG
	tni-let-7b	CAGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUGAUUUUGCCCCAUCAGGAGCUAACUAUACAACCUACUGCCUUCCCUG
	tni-let-7d	UGUGCUCUGCAGUGUGAGGUAGUUGGUUGUAUGGUUUCGCAUAAUAAACAGCACGGAGAUAACUGUACAACCUUCUAGCUUUCCCUGCGGAGUCAC
	tni-let-7e	GCUGUCCUUGGGGCUGAGGUAGUAGAUUGAAUAGUUGUGGGGUUGUGUGACCUCUAUGUGAGAUAACUAUACAAUCUACUGUCUUUCCCAAGGAGACAGC
	tni-let-7g	UGGGAUGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUAACUAUACAGUCUACUGUCUUUCCCA
	tni-let-7h	AAUUGGCUUUGCUGUGGUGAGGUAGUAAGUUGUGUUGUUGUUGGGGAUCAAGAUUGUGCACCCUGUCAAGGAGAUAACUAUACAACUUACUGCCUUCCU
	tni-let-7i	CUGGCUGAGGUAGUAGUUUGUGCUGUUGGUUGGGUUGUGACACUGCCCGCUAUGGAGAUGACUGCGCAAGCUACUGCCUUGCUA
	tni-let-7j	GUCUGAGGUAGUUUUUUGUACAGUUUGAGGGUCUGUGAUUCUGCCCCAUACAGGAGCUAACUGUACAAGUGACUGCCUUGCC
Ictalurus punctatus	ipu-let-7a-1	UGAGGUAGUAGGUUGUAUAGUUUUAGGGUCACACCCACACUGGGAGAUAACUAUACAACCUACUGUCUUUCU
	ipu-let-7a-2	UGAGGUAGUAGGUUGUAUAGUUUAGAAUAACAUCACUGGAGAUAACUGUACAACCUCCUAGCUUUCC
	ipu-let-7a-3	UGAGGUAGUAGGUUGUAUAGUUUGAGGGUUUAACCCUUGCUGUCAGAUAACUAUACAACUUACUGUCUUUCC
	ipu-let-7a-4	UGAGGUAGUAGGUUGUAUAGUUUAGAGUUACAACACGGGAGAUAACUGUACAGCCUCCUAGCUUUCC
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	ipu-let-7a-6	UGAGGUAGUAGGUUGUAUAGUUUGUGGGAAGGAUCACAUCCUAUUCAGGUGAUAACUAUACAGUCUAUUGCCUUCC
	ipu-let-7a-7	UGAGGUAGUAGGUUGUAUAGUUUUAGGGUGACACCCUUCCUGUUAGAUAACUAUACAACUUACUGUCUUUCC
	ipu-let-7b-1	UGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUGUUUUUGCCCCAUCAGGAGUUAACUAUACAACCUACUGCCUUCCC
	ipu-let-7b-2	UGAGGUAGUAGGUUGUGUGGUUUCAGGGUAGUGAUUUUGCCCCAUCAGGAGUUAACUAUACAACCUACUGCCUUCCC
	ipu-let-7c-1	UGAGGUAGUAGGUUGUAUGGUUUAGAAUUUUGCCCUGGGAGUUAACUGUACAACCUUCUAGCUUUCC
	ipu-let-7c-2	UGAGGUAGUAGGUUGUAUGGUUUCGAAUGACACCAUGGGAGUUAACUGUACAACCUUCUAGCUUUCC
	ipu-let-7d-1	UGAGGUAGUUGGUUGUAUGGUUUUGCAUAAUAAACAGCCCGGAGUUAACUGUACAACCUUCUAGCUUUCC

	ipu-let-7d-2	UGAGGUAGUUGGUUGUAUGGUUUUGCAUCAUAAUCAGCCUGGAGUUAACUGUACAACCUUCUAGCUUUCC
	ipu-let-7e-1	UGAGGUAGUAGAUUGAAUAGUUGUGGAGCCCUGCGCUCUCUCUCUGAGAUAACUAUACAAUCUACUGUCUUUC
	ipu-let-7e-2	UGAGGUAGUAGAUUGAAUAGUUGUGGAGUAUAAAACCUCCCUUUGAGAUAACUAUACAAUCUACUGUCUUUCU
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	ipu-let-7g-1	UGAGGUAGUAGUUUGUAUAGUUUGGGAUCACACCAGAUCUGGGAGAUAACUAUACAGCCUACUGUCUUUCU
	ipu-let-7g-2	UGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUAACUAUACAGUCUACUGUCUUUCC
	ipu-let-7h	UGAGGUAGUAAGUUGUGUUGUUGUUGGGGAUCAGUAUAGUAUGGCCCUUGAAGGAGAUAACUAUACAAUUUACUGCCUUCC
	ipu-let-7i	UGAGGUAGUAGUUUGUGCUGUUGGUUGGGAUGUGACAUUGCCCGUUAUGGAGAUGACUGCGCAAGCUACUCCCUUG
	ipu-let-7j-1	UGAGGUAGUUGUUUGUACAGUUUUUAGGGUCUGUUAUUCUGCCCUGUUAAGGAGCUAACUGUACAGACUACUGCCUUGC
	ipu-let-7j-2	UUGUGUAUGGCUGUUUAUCCUUGCCUGUUCUGGGUUGAGGUAGUUGUUUGUACAGUU
Cyprinus carpio	ccr-let-7a	UGUUUCGGGAUGAGGUAGUAGGUUGUAUAGUUUAGAGUUACAACAUGGGAGAUAACUGUACAGCCUCCUAGCUUUCCCCGA
	ccr-let-7b	AGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGUAGUGAUUUUGCCCCAUCAGGAGAUAACUAUACAACCUACUGCCUUCCC
	ccr-let-7g	UGUGGGAUGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUAACUAUACAGUCUACUGUCUUUCCCACGGUAA
	ccr-let-7i	UUUAGCCGUGUACUGGCUGAGGUAGUAGUUUGUGCUGUUGGUUGGGAUGUGACAUUGCCCGUUAUGGAGAUGACUGCGCAAGCUACU CCCUUGCCAGUGCUGGUUACACUCU
	ccr-let-7j	CUGCUCUGGGUUGAGGUAGUUGUUUGUACAGUUUUUAGGGUCUGUUAUUCUGCCCUGUUAAGGAGUUAACUGUACAGACUACUGCCU UGCCCAGGGU
Paralichthys olivaceus	pol-let-7a	UGAGGUAGUAGGUUGUAUGGUUUGUGGGAUGGAGUAAAUCCUACUCAGGGGAUAACUAUACAACCUACUGCCUUCC
	pol-let-7b	UGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUGAUUUUACCCCAUCAGGAGCUAACUAUACAACCUACUGCCUUCC
	pol-let-7d	UGAGGUAGUUGGUUGUAUGGUUUCGCAUAAUAAACAGCACGGAGAUAACUGUACAACCUUCUAGCUUUCC
Hippoglossus hippoglossus	hhi-let-7c	AUGUGUGCAUCCGGGUUGAGGUAGUAGGUUGUAUGGUUUAGAAUUACACCCUGGGAGUUAACUGUACAACCUUCUAGCUUUCCUUGG AGUACACGU
	hhi-let-7j	GGUCUGAGGUAGUUGUUUGUACAGUUUGAGGGUCUGUGAUUCUGCCCCAUACAGGAGCUAACUGUACAAGUGACUG
Salmo salar	ssa-let-7a-1	UGAGGUAGUAGGUUGUAUAGUUCAGAGUGACAUCACAGGAGAUAACUGUACAGCCUCCUAGCUUUCC

	ssa-let-7a-2	UGAGGUAGUAGGUUGUAUAGUUGAGAAUUACACCCCGGGAGAUAACUGUACAGCCUCCUAGCUUUCC
	ssa-let-7a-3	UGAGGUAGUAGGUUGUAUAGUUUUAGGGUCAUACCCUUCCUGUCAGAUAACUAUACAACUUACUGUCUUUCC
	ssa-let-7a-4	UGAGGUAGUAGGUUGUAUAGUUUGUGGGAGGGAUUUAAUCCUAUUCAGGUGAUAACUAUACAGUCUAUUGCCUUCCU
	ssa-let-7a-5	UGAGGUAGUAGGUUGUAUAGUUUGUGAAGGGAUAGAAUCCUAUUCAGGUGAUAACUAUACAGUCUAUUGCCUUCCU
	ssa-let-7b-1	UGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUUAUUUUGCCCCAUCAGGAGUUAACUGUACAACCUACUGCCUUCCC
	ssa-let-7b-2	UGAGGUAGUAGGUUGUGUGGUUUCAGGGUUGUGAUUUUGCCCCAUCAGGAGUUAACUGUACAACCUACUGCCUUCCC
	ssa-let-7c-1	UGAGGUAGUAGGUUGUAUGGUUUAGAAUGACACCCUAGGAGUUAACUGUACAACCUUCUAGCUUUCC
	ssa-let-7c-2	UGAGGUAGUAGGUUGUAUGGUUUAGAAUGACACCCUGGGAGUUAACGGUACAACCUUCUAGCUUUCCU
	ssa-let-7d-1	UGAGGUAGUUGGUUGUAUGGUUUCACAUAAUAAACAGCCCGGAGAUAACUGUACAACCUUCUAGCUUUCC
	ssa-let-7d-2	UGAGGUAGUUGGUUGUAUGGUUUCGCAUAAUAAACAGUCCGGAGAUAACUGUACAACCUUCUAGCUUUCC
	ssa-let-7e-1	UGAGGUAGUAGAUUGAAUAGUUGUGGGGUAUAUGUCCUCCCUCUGACAUAACUAUACAAUCUACUGUCUUUCC
	ssa-let-7e-2	UGAGGUAGUAGAUUGAAUAGUUGUGGGGUAUAUGUCCUCCCUCUGAGAUAACUAUACAAUCUACUGUCUUUCC
	ssa-let-7f	UGAGGUAGUAGAUUGUAUUGUUGUGGGGUAGUGAUUUUACCCUGAUCAGAAGAUAACUAUACAAUCUAUUGCCUUCCC
	ssa-let-7g-1	UGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUGACUAUACAGUCUACUGUCUUUCC
	ssa-let-7g-2	UGAGGUAGUAGUUUGUAUAGUUUUAGGAUCACACCAGAUCUGGGAGAUAACUAUACAGUCUACUGUCUUUCC
	ssa-let-7h	UGAGGUAGUAAGUUGUGUUGUUGUUGGGGAUCAGGAUAGUGCGCCCCGUACGGGAGAUAACUAUACAACUUACUGCCUUCCU
	ssa-let-7i-1	UGAGGUAGUAGUUUGUGCUGUUGGUCGGGUUGUGACAUGGCCUGCUGUGGAGAUAACUGCGCAAACGACUACCUUGCC
	ssa-let-7i-2	UGAGGUAGUAGUUUGUGCUGUUGGUUGGGUUAUGACAUUUCCCGCUAUGGAGAUGACUGCGCAAGCUACUGCCUUGCC
	ssa-let-7j	UGAGGUAGUAGGUUGGAUAGUUUUAGGGUCACACCCACACUGGGAGAUAACUGUACAACCUACUGUCUUUCU
Branchiostoma floridae	bfl-let-7a-1	CUGAGGUGAGGUAGUAGGUUGUAUAGUUCAGAAGUACAACAUUGGAGAUGACUGUACAACCCGUUACCUUUUUUUGGGUCAU
	bfl-let-7a-2	AGACACGGGUGCACCUGAGGUGAGGUAGUAGGUUGUAUAGUUGAGAAGUACAUCAUUGGAGAUAACUGUGCAACCUGCUAGCUCUCC UUGGGGCAUGCC
	bfl-let-7b	GUAUGACCCAAAAAAAGGUAACGGGUUGUACAGUCAUCUCCAAUGUUGUACUUCUGAACUAUACAACCUACUACCUCACCUC

Branchiostoma belcheri	bbe-let-7a-1	CUGAGGUGAGGUAGUAGGUUGUAUAGUUGAGAAGUACAACAUUGGAGAUGACUGUACAACCCGUUACCUUUUUUCGGGUCAU
	bbe-let-7a-2	AGACAAGGGUGCGCCUGAGGUGAGGUAGUAGGUUGUAUAGUUGAGAAGUACAUCAUUGGAGAUAACUGUGCAACCUGCUAGCUCUCCUUGGGGCAUGCC
Homo sapiens	hsa-let-7a-1	UGGGAUGAGGUAGUAGGUUGUAUAGUUUUAGGGUCACACCCACCACUGGGAGAUAACUAUACAAUCUACUGUCUUUCCUA
	hsa-let-7a-2	AGGUUGAGGUAGUAGGUUGUAUAGUUUAGAAUUACAUCAAGGGAGAUAACUGUACAGCCUCCUAGCUUUCCU
	hsa-let-7a-3	GGGUGAGGUAGUAGGUUGUAUAGUUUGGGGCUCUGCCCUGCUAUGGGAUAACUAUACAAUCUACUGUCUUUCCU
	hsa-let-7b	CGGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGCAGUGAUGUUGCCCCUCGGAAGAUAACUAUACAACCUACUGCCUUCCCUG
	hsa-let-7c	GCAUCCGGGUUGAGGUAGUAGGUUGUAUGGUUUAGAGUUACACCCUGGGAGUUAACUGUACAACCUUCUAGCUUUCCUUGGAGC
	hsa-let-7d	CCUAGGAAGAGGUAGUAGGUUGCAUAGUUUUAGGGCAGGGAUUUUGCCCACAAGGAGGUAACUAUACGACCUGCUGCCUUUCUUAGG
	hsa-let-7e	CCCGGGCUGAGGUAGGAGGUUGUAUAGUUGAGGAGGACACCCAAGGAGAUCACUAUACGGCCUCCUAGCUUUCCCCAGG
	hsa-let-7f-1	UCAGAGUGAGGUAGUAGAUUGUAUAGUUGUGGGGUAGUGAUUUUACCCUGUUCAGGAGAUAACUAUACAAUCUAUUGCCUUCCCUGA
	hsa-let-7f-2	UGUGGGAUGAGGUAGUAGAUUGUAUAGUUUUAGGGUCAUACCCCAUCUUGGAGAUAACUAUACAGUCUACUGUCUUUCCCACG
	hsa-let-7g	AGGCUGAGGUAGUAGUUUGUACAGUUUGAGGGUCUAUGAUACCACCCGGUACAGGAGAUAACUGUACAGGCCACUGCCUUGCCA
	hsa-let-7i	CUGGCUGAGGUAGUAGUUUGUGCUGUUGGUCGGGUUGUGACAUUGCCCGCUGUGGAGAUAACUGCGCAAGCUACUGCCUUGCUA
Mus musculus	mmu-let-7a-1	UUCACUGUGGGAUGAGGUAGUAGGUUGUAUAGUUUUAGGGUCACACCCACCACUGGGAGAUAACUAUACAAUCUACUGUCUUUCCUAAGGUGAU
	mmu-let-7a-2	CUGCAUGUUCCCAGGUUGAGGUAGUAGGUUGUAUAGUUUAGAGUUACAUCAAGGGAGAUAACUGUACAGCCUCCUAGCUUUCCUUGGGACUUGCAC
	mmu-let-7b	GCAGGGUGAGGUAGUAGGUUGUGUGGUUUCAGGGCAGUGAUGUUGCCCCUCCGAAGAUAACUAUACAACCUACUGCCUUCCCUGA
	mmu-let-7c-1	UGUGUGCAUCCGGGUUGAGGUAGUAGGUUGUAUGGUUUAGAGUUACACCCUGGGAGUUAACUGUACAACCUUCUAGCUUUCCUUGGAGCACACU
	mmu-let-7c-2	ACGGCCUUUGGGGUGAGGUAGUAGGUUGUAUGGUUUUGGGCUCUGCCCCGCUCUGCGGUAACUAUACAAUCUACUGUCUUUCCUGAAGUGGCCGC
	mmu-let-7e	CGCGCCCCCCGGGCUGAGGUAGGAGGUUGUAUAGUUGAGGAAGACACCCGAGGAGAUCACUAUACGGCCUCCUAGCUUUCCCCAGGCUGCGCC
	mmu-let-7f-1	AUCAGAGUGAGGUAGUAGAUUGUAUAGUUGUGGGGUAGUGAUUUUACCCUGUUUAGGAGAUAACUAUACAAUCUAUUGCCUUCCCUGAG
	mmu-let-7f-2	UGUGGGAUGAGGUAGUAGAUUGUAUAGUUUUAGGGUCAUACCCCAUCUUGGAGAUAACUAUACAGUCUACUGUCUUUCCCACG

	mmu-let-7g	CCAGGCUGAGGUAGUAGUUUGUACAGUUUGAGGGUCUAUGAUACCACCCGGUACAGGAGAUAACUGUACAGGCCACUGCCUUGCCAGG
	mmu-let-7i	CUGGCUGAGGUAGUAGUUUGUGCUGUUGGUCGGGUUGUGACAUUGCCCGCUGUGGAGAUAACUGCGCAAGCUACUGCCUUGCUAG
	mmu-let-7j	AUUGGAGGCUAUUUCUGAUCAUGAUAAUUUCCUGAGGUAUUAGUUUGUGCUGUUAUAUGAAUCGAAUAAUAUCCCUUGCUCAGAUUA AAAGCCUGGAGUUAAAAAAAUCAAGUGCCUUGAAC
	mmu-let-7k	UAGCCACAGCCCUAACCCUAGCCUGAGGUAGGAGGUUGUGUGCAAGCUCACCACUAACCUAUAGUACACAGAGAGCCUUUAUCCCACA ACACAACACAAAACAAUACUUC
Petromyzon marinus	pma-let-7a-1	UGUGGGCUCCUGGGUUGAGGUAGUAGGUUGUAUAGUUUAAGGGGCAGACAUUCAUCUUCCCUUAUCGGAGAUAAGCUAUGCAGCCAA CUGCCUUUCCCAGGGCUUCGC
	pma-let-7a-2	UGAGUGCGCCCUGGGAUGAGGUAGUAGGUUGUAUAGUUUCAGGGUCACACCCAAACUGGGAGUUAACUGUACAAUCUACUCUCUUUCC CAAGGCGGCACGCUG
	pma-let-7a-3	GCGUGGGAUGAGGUAGUAGGUUGUAUAGUUUGGGGAGUGUGACCCCGUUCAGGAGAUAACUGUACAAUCUACUGUCUUGCCCAAGC
	pma-let-7a-4	GUUUUCGGGGUGAGGUAGUAGGUUGUAUAGUUUAGCAUUACACCUACGGAGAUAACUGUACAACCUUCUAGCUUUCCCCGCGGGC
	pma-let-7b	GCAGGGUGAGGUAGUAGGUUUUGUAGUUCUGCGGGCAGAGAUUUUGCCCAGCGAGUGGAGAUGAACUAUAUAAUCUACUGCCUUGCC CGGA
	pma-let-7c	CCGGCUCGCGGGGUGAGGUAGUAGAUUGUAUGGUUUUAGGGUCACACCCUCGGUUGGGAGAUAACUAUGCAAUCUACUGUCUUUCCCG CGGGUGCG
	pma-let-7d	GGUGAGGUGAGGUAGUAGGUUGUAAAGUUGUAGGGUGUCAUUUGUUUACACCCGAUUUGGAGAUAACUGUACAACCUAUUGCCUUC
Drosophila melanogaster	dme-let-7	UCUGGCAAAUUGAGGUAGUAGGUUGUAUAGUAGUAAUUACACAUCAUACUAUACAAUGUGCUAGCUUUCUUUGCUUGA
Caenorhabditis elegans	cel-let-7	UACACUGUGGAUCCGGUGAGGUAGUAGGUUGUAUAGUUUGGAAUAUUACCACCGGUGAACUAUGCAAUUUUCUACCUUACCGGAGAC AGAACUCUUCGA

Table S2 The phenotypic data of sampling fish in fast- and slow-growth groups of *Megalobrama amblycephala*

Groups	3-month old			6-month old			12-month old		
	Body length (cm)	Body height (cm)	Body weight (g)	Body length (cm)	Body height (cm)	Body weight (g)	Body length (cm)	Body height (cm)	Body weight (g)
Fast-growth group	9.3	3.6	15.2	12.2	4.9	41.7	13.0	5.2	48.6
	9.6	3.6	16.5	12.1	4.8	38.2	13.3	5.5	51.1
	9.2	3.6	16.0	11.7	4.6	36.4	13.1	5.0	44.7
Slow-growth group	5.0	1.8	3.1	5.9	2.0	3.6	7.5	2.5	7.2
	5.3	1.8	3.6	6.5	2.2	4.8	7.5	2.6	7.7
	5.1	1.8	2.9	6.4	2.3	5.4	8.2	3.0	10.6