

Additional file 3:

Supplementary Table S3. Genomic exon-intron organization of muscle actin genes in teleost species examined in this study

Species	Actin isoforms (annoation in GenBank)	Accession code (Gene ID)	No. of translated exon	Location
Channel catfish (<i>Ictalurus punctatus</i>)	acta1 - actin, alpha 1, skeletal muscle	108263396	6	Chromosome 3, NC_030418.1
	LOC108269850 - actin, alpha cardiac muscle 1-like	108269850	6	Chromosome 9, NC_030424.1
	LOC108269395 - actin, alpha cardiac muscle 1-like	108269395	8	Chromosome 8, NC_030423.1
	act2 - actin alpha sarcomeric/cardiac	100528996	8	Chromosome 9, NC_030424.1
	acta2 - actin, alpha 2, smooth muscle, aorta	100304861	8	Chromosome 13, NC_030428.1
Pufferfish (<i>Takifugu rubripes</i>)	acta1a - alpha skeletal muscle A-like	101069447	6	Chromosome 13, NC_018902.1
	LOC101069692 - actin, alpha skeletal muscle	101069692	2	Chromosome 21, NC_018910.1
	actc1 - actin, alpha, cardiac muscle 1	101080182	6	Chromosome 2, NC_018891.1
	LOC101077200 - actin, alpha cardiac	101077200	7	Chromosome 16, NC_018905.1
	LOC101062076 - actin, alpha cardiac	101062076	8	Chromosome 2, NC_018891.1
	LOC101072885 - actin, alpha cardiac	101072885	6	Unplaced scaffold
	LOC101074318 - actin, alpha anomalous	101074318	6	Unplaced scaffold
Japanese medaka (<i>Oryzias latipes</i>)	acta1 - actin, alpha 1, skeletal muscle	100049431	6	Chromosome 3, NC_019861.1
	LOC101170382 - actin, alpha cardiac	101170382	8	Chromosome 22, NC_019880.1
	LOC101161456 - actin, alpha cardiac	101161456	7	Chromosome 24, NC_019882.1
	LOC101159887 - actin, alpha cardiac	101159887	6	Chromosome 1, NC_019859.1
	LOC101163135 - actin, alpha skeletal muscle B (acta2)	101163135	8	Unplaced scaffold
Large yellow croaker (<i>Larimichthys crocea</i>)	LOC104920157 - actin, alpha skeletal muscle A	104920157	6	Unplaced scaffold
	actc1 - actin, alpha, cardiac muscle 1	104922409	6	Unplaced scaffold
	LOC109141717 - actin, alpha cardiac	109141717	8	Unplaced scaffold
	LOC104931734 - actin, alpha cardiac	104931734	7	Unplaced scaffold
	LOC104926557 - actin, alpha cardiac	104926557	8	Unplaced scaffold
	LOC104918508 - actin, alpha cardiac	104918508	6	Unplaced scaffold
	acta2 - actin, alpha 2, smooth muscle, aorta	104936549	8	Unplaced scaffold
Northern pike (<i>Esox lucius</i>)	actc1 - actin, alpha, cardiac muscle 1	105015494	6	Chromosome LG15, NC_025982.3
	LOC105018274 - actin, alpha cardiac muscle 1	105018274	7	Chromosome LG19, NC_025986.3
	LOC105021204 - actin, alpha cardiac	105021204	6	Chromosome LG05, NC_025972.3
	LOC105021500 - actin, alpha cardiac	105021500	6	Chromosome LG09, NC_025976.3
	LOC105024319 - actin, alpha cardiac	105024319	7	Chromosome LG23, NC_025990.3
	LOC105015666 - actin, alpha cardiac-like	105015666	8	Chromosome LG15, NC_025982.3
	LOC105017577 - actin, alpha cardiac muscle 1	105017577	6	Chromosome LG18, NC_025985.3
Japanese flounder (<i>Paralichthys olivaceus</i>)	acta2 - actin, alpha 2, smooth muscle, aorta	105006355	8	Chromosome LG05, NC_025972.3
	LOC109636843 - actin, alpha skeletal muscle	109636843	6	Unplaced scaffold
	LOC109647312 - actin, alpha skeletal muscle B-like	109647312	8	Unplaced scaffold
	LOC109628044 - actin, alpha cardiac-like	109628044	8	Unplaced scaffold
	LOC109636065 - actin, alpha cardiac	109636065	7	Unplaced scaffold
	LOC109646190 - actin, alpha cardiac muscle 1	109646190	6	Unplaced scaffold
Nile tilapia (<i>Oreochromis niloticus</i>)	LOC109647272 - actin, alpha cardiac	109647272	6	Unplaced scaffold
	acta1 - actin, alpha 1, skeletal muscle	100534413	6	Chromosome LG1, NC_031965.1
	actc1 - actin, alpha, cardiac muscle 1	100694494	6	Chromosome LG19, NC_031983.1
	LOC100712462 - actin, alpha cardiac	100712462	7	Chromosome LG15, NC_031980.1
	LOC100706681 - actin, alpha cardiac	100706681	6	Chromosome LG6, NC_031971.1
	LOC100534411 - actin, alpha cardiac	100534411	8	Chromosome LG19, NC_031983.1
Atlantic salmon (<i>Salmo salar</i>)	acta2 - actin, alpha 2, smooth muscle, aorta	100708176	8	Chromosome LG8, NC_031973.1
	LOC106610721 - actin, alpha skeletal muscle 2-like	106610721	6	Chromosome ssa01, NC_027300.1
	LOC106564730 - actin, alpha skeletal muscle 2-like	106564730	6	Chromosome ssa12, NC_027311.1
	LOC106589658 - actin, alpha skeletal muscle 2-like	106589658	6	Chromosome ssa28, NC_027327.1
	LOC106587486 - actin, alpha skeletal muscle 2-like	106587486	6	Chromosome ssa02, NC_027301.1
	LOC106610845 - actin, alpha cardiac-like	106610845	8	Chromosome ssa09, NC_027308.1
	LOC106608259 - actin, alpha cardiac	106608259	7	Chromosome ssa06, NC_027305.1
Atlantic salmon (<i>Salmo salar</i>)	actc1 - actin, alpha, cardiac muscle 1	106601553	6	Chromosome ssa01, NC_027300.1

	LOC106608170 - actin, alpha cardiac muscle 1-like	106608170	6	Chromosome ssa06, NC_027305.1
	LOC106573099 - actin, alpha cardiac muscle 1-like	106573099	7	Chromosome ssa16, NC_027315.
	LOC106571646 - actin, alpha cardiac muscle 1-like	106571646	6	Chromosome ssa15, NC_027314.1
	LOC106571104 - actin, alpha cardiac	106571104	7	Chromosome ssa15, NC_027314.1
	LOC106561611 - actin, alpha cardiac muscle 1-like	106561611	7	Chromosome ssa10, NC_027309.1
	LOC106589387 - actin, aortic smooth muscle	106589387	8	Chromosome ssa28, NC_027327.1
	LOC106578961 - actin, aortic smooth muscle	106578961	8	Chromosome ssa19, NC_027318.1
Zebrafish (<i>Danio rerio</i>)	acta1a - actin, alpha 1a, skeletal muscle	550445	6	Chromosome 1, NC_007112.7
	acta1b - actin, alpha 1b, skeletal muscle	407658	6	Chromosome 13, NC_007124.7
	actc1a - actin, alpha, cardiac muscle 1a	408256	8	Chromosome 20, NC_007131.7
	actc1b - actin, alpha, cardiac muscle 1b	58114	8	Chromosome 17, NC_007128.7
	acta2 - actin, alpha 2, smooth muscle, aorta	322509	8	Chromosome 12, NC_007123.7
Common carp (<i>Cyprinus carpio</i>)	LOC109108280 - actin, alpha skeletal muscle	109108280	8	Chromosome 34, NC_031730.1
	LOC109104956 - actin, alpha skeletal muscle 2-like	109104956	7	Chromosome 31, NC_031727.1
	LOC109100842 - actin, alpha skeletal muscle 2-like	109100842	6	Chromosome 26, NC_031722.1
	LOC109055631 - actin, alpha skeletal muscle 2-like	109055631	8	Unplaced scaffold
	LOC109084290 - actin, alpha skeletal muscle A-like	109084290	7	Unplaced scaffold
	LOC109044918 - actin, alpha sarcomeric/skeletal-like	109044918	6	Chromosome 40, NC_031736.1
	LOC109113560 - actin, alpha cardiac	109113560	8	Chromosome 40, NC_031736.1
	LOC109082580 - actin, alpha cardiac muscle 1	109082580	7	Unplaced scaffold
	LOC109052669 - actin, alpha cardiac muscle 1-like	109052669	8	Unplaced scaffold
	LOC109099485 - actin, aortic smooth muscle	109099485	8	Chromosome 23, NC_031719.1