

Supplementary Table

Table S1. mstn2a proteins used in multiple alignment.

Species	Protein name	Total AA identity %
<i>Acanthopagrus latus</i>	mstn2b	100
<i>Acanthopagrus latus</i>	mstn2a	99.8
<i>Sparus aurata</i>	mstn2	98.3
<i>Lepisosteus oculatus</i>	mstn2	96.4
<i>Larimichthys crocea</i>	mstn2	96.4
<i>Oreochromis niloticus</i>	mstn2	95.4
<i>Tetraodon nigroviridis</i>	mstn2	93.6
<i>Xiphophorus maculatus</i>	mstn2	86.6
<i>Gasterosteus aculeatus</i>	mstn2	82.2
<i>Hippocampus comes</i>	mstn2	81.0
<i>Cynoglossus semilaevis</i>	mstn2	80.5
<i>Chrysemys picta bellii</i>	mstn	80.5
<i>Danio rerio</i>	mstn2	62.5
<i>Homo sapiens</i>	mstn2	61.8
<i>Mus musculus</i>	mstn2	61.3
<i>Gallus gallus</i>	mstn2	59.4

Table S2. Lengths of exons (bp) and introns (bp) of each mstn2 gene.

Species	E1	I1	E2	I2	E3	I3	E4
<i>Acanthopagrus latus mstn2a</i>	328	969	371	323	381	-	-
<i>Acanthopagrus latus mstn2b</i>	328	956	371	323	381	-	-
<i>Sparus aurata</i>	328	940	371	341	381	-	-
<i>Larimichthys crocea</i>	328	877	371	435	381	-	-
<i>Gasterosteus aculeatus</i>	271	21	42	195	359	120	381
<i>Tetraodon nigroviridis</i>	325	642	374	69	381	-	-
<i>Xiphophorus maculatus</i>	331	829	371	932	381	-	-
<i>Oreochromis niloticus</i>	340	849	368	264	381	-	-
<i>Cynoglossus semilaevis</i>	280	693	371	253	381	-	-
<i>Hippocampus comes</i>	76	4659	243	2003	365	1594	381
<i>Lepisosteus oculatus</i>	373	1209	1074	381	371	-	-
<i>Danio rerio</i>	361	1202	2201	369	371	-	-
<i>Chrysemys picta bellii</i>	373	2656	3133	381	374	-	-
<i>Gallus gallus</i>	373	2091	2274	381	374	-	-
<i>Homo sapiens</i>	374	1788	2423	381	374	-	-
<i>Mus musculus</i>	376	1741	1994	381	374	-	-

Table S3. Mstn1 and mstn2 proteins used in this study.

Species	Abbreviation	Protein name	No.	Protein name	No.
<i>Acanthopagrus latus</i>	Ala	mstn1	OR735568	mstn2a	OR735569
				mstn2b	OR735570
<i>Sparus aurata</i>	Sau	mstn1	ENSSAUT00010010370.1	mstn2	ENSSAUT00010053325.1
<i>Larimichthys crocea</i>	Lcr	mstn1	ENSLCRT00005045592.1	mstn2	ENSLCRT00005044672.1
<i>Oreochromis niloticus</i>	Oni	mstn1	ENSONIT00000048569.1	mstn2	ENSONIT00000015370.2
<i>Cynoglossus semilaevis</i>	Cse	mstn1	XP_008327219.1	mstn2	ENSCSET00000008642.1
<i>Gasterosteus aculeatus</i>	Gac	mstn1	ENSSAUT00010010370.1	mstn2	ENSGACT00000020597.1
<i>Xiphophorus maculatus</i>	Xma	mstn1	---	mstn2	ENSXMAT00000021209.1
<i>Tetraodon nigroviridis</i>	Tni	mstn1	ENSTNIT00000019017.1	mstn2	ENSTNIT00000020527.1
<i>Hippocampus comes</i>	Hco	mstn1	ENSHCOT00000004812.1	mstn2	ENSHCOT00000001635.1
<i>Lepisosteus oculatus</i>	Loc	mstn1	ENSLOCT00000010751.1	mstn2	---
<i>Danio rerio</i>	Dre	mstn1	ENSDART00000100386.2	mstn2	ENSDART00000063055.5
<i>Chrysemys picta bellii</i>	Xtr	mstn	ENSCPBT00000034185.1	mstn2	---
<i>Gallus gallus</i>	Gga	mstn	ENSGALT00010030820.1	mstn2	---
<i>Homo sapiens</i>	Hsa	mstn	ENST00000260950.5	mstn2	---
<i>Mus musculus</i>	Msu	mstn	ENSMUST00000027269.7	mstn2	---