S3 File. LSOs accession codes, Real time PCR primer sequences and PCR efficiencies. Primers used for qPCR amplification of the LSOs *akt2*, *atf4*, *cdc42bpa*, *chuk*, *eif3j*, *fst*, *grb2*, *igf2*, *igf2bp2*, *igfbp3*, *mef2d*, *myod*, *pik3ca*, *pip4k2a*, *raf1*, *rictor*, *rragc*, *tgfb1*, *tgfb3* and *trim63*. Primers were also designed for the reference genes *rpl13*, *rpl19* and *ppiaa*, and also for the *fbxo32* to prove the efficacy of fasting-refeeding treatments. Accession code based on European Nucleotide Archive - ENA (accession number PRJEB6656) for pacu (Mareco et al., 2015) and Ensembl Genome Browser 102 database (https://www.ensembl.org) for Nile tilapia.

Gene	Accession Code	Primers (5' to 3')	E (%)	Tm (°C)
akt2 pacu	comp144275_c3_seq41	F: CCAATGCTGAGAGGGAAGAG R: GTTGATGTCCATTGGCTCCT	96	80
akt2a tilapia	ENSONIP00000006025	F: AACCAATGGATGTTCTCAGC R: GGACATAACCGCTTCCATCT	102	75
akt2b tilapia	ENSONIP00000006516	F: CTCCCCGAGTGACAGCAGTGG R: CTGTTGCCTTCTCCTTCACC	99	81
atf4 pacu	comp145578_c0_seq1	F: GGAGCAAGAACCACCACAAT R: GGGCAGTGAAGTGGACATCT	104	84
atf4a tilapia	ENSONIP00000016467	F: GTTGGAGCAGATGATGGCA R: TCCAATGAAAGACTCCAGGTC	97	77
atf4b tilapia	ENSONIP00000010752	F: GGATGTGCTCAGTGACTTGG R: CAGTGAGTCCAGGTCAAGGTC	99	77
cdc42bpaa pacu	comp123183_c0_seq3	F: GGCACTCTGACTTGTCCCTC R: ACCTCTCTGATGGTGGGACT	96	83
cdc42bpab pacu	comp145167_c3_seq39	F: GATCTTCCAGTCGGGGTC R: CTCCGTCTAACACCCCATCAC	100	84
cdc42bpa tilapia	ENSONIP00000001562	F: GTGAGCGGGAAGAGTTTGAG R: TTTCTTCGGTGAGCAGGACT	98	77
chuk pacu	comp143689_c1_seq38	F: ATCGTTTGTGGGCACTCTTC R: TACGCACTTTGCTTGTCCAC	95	81
chuka tilapia	ENSONIP00000022863	F: GCTGTTGGAGCCGATGGAGG R: AGCAGAGGGGTTTCTTGGTT	96	81
chukb tilapia	ENSONIP00000012095	F: CGGCACAAACAAGCCATACT R: TATCCTCAGCACCCAAAACC	95	78
eif3ja pacu	comp137884_c0_seq67	F: GAGGAATCAAAAGACAGCACAG R: AAGCATCTTTCGCTAGTTCCA	98	77
eif3jb pacu	comp144636_c0_seq88	F: GAGTCCCAGGCTGATGTGC R: GGGACACATGGCTTCAATTC	97	83
eif3j tilapia	ENSONIP00000007868	F: ACAACAGGAGGCAATGGAAC R: AGCTCCAAGTCTGCGTCTTC	97	77
fsta pacu	comp143036_c0_seq11	F: AATGTCCCGAGCCTTCCACT R: CTCTGGCTCTGGCATTTCAC	96	84
fstb pacu	comp144113_c3_seq1	F: CACCACCATTCAGGAGCAG R: GAAGAACGGGAGATGTCAGG	98	84
fst tilapia	ENSONIP00000017943	F: GGATGCTGAAACACCACCTT R: ATGTAGAGCACCTGGCACCT	97	80
grb2a pacu	comp138113_c0_seq16	F: CCCATCTTCCTGAGAGACATC R: GTTAGGGTCCGAGTTGTCCA	105	84

grb2b pacu	comp116716_c1_seq1	F: CCCTGTTTGATTTTGACCCT R: CGTAATTGCGTGGGAACATT	104	83
grb2 tilapia	ENSONIP00000010393	F: TATAGAGCAGGTCCCCCAGA R: ACCAGTTGGGGTCAGAGTTG	97	83
igf2a pacu	comp133875_c0_seq2	F: AGAAGGCTCAAAGGCTCAGG R: CTGTTGGGCACGGTCATC	101	83
igf2b pacu	comp133875_c0_seq1	F: CAACTTCCACAAGCCTCTCATCTC R: CGTAGTCTTCTGTGGGATGC	99	79
igf2 tilapia	ENSONIP00000018238	F: CCCAGCAAAGATACGGACAT R: CCTCTGGACCTTCATTCTGC	100	79
igf2bp2a pacu	comp140394_c4_seq8	F: CCTGATGCTCCTGAGAGAATG R: GCGGGGACTTTGATATGTGT	96	82
igf2bp2b pacu	comp59776_c0_seq2	F: GCTGCGGAGAAACCTATCAC R: AACCTCCTCAGCAGTTTTGG	99	81
igf2bp2 tilapia	ENSONIP00000011355	F: CAGAAGGAAGCCAACGAGAC R: TCCCTGTGTCCTCCTCAATC	103	83
igfbp3 pacu	comp129938_c2_seq1	F: TTCGTAGCCTGGCAGAGACT R: GTTTCCGCATTCCAAACTGT	97	80
igfbp3a tilapia	ENSONIP00000008019	F: CGTTGGAACTGTGAAGGATG R: GCTCTGGGTCTTCCTGTTCTC	105	79
igfbp3b tilapia	ENSONIP00000012146	F: GGGCTCATTTGTCAACATCA R: CATTGACTGGCACTGTTGGT	96	81
mef2d pacu	comp141550_c0_seq12	F: CTTGCTGCTTTGTGAGGTGA R: CCTCCTCTCTGTCTCCAACG	96	84
mef2da tilapia	ENSONIP00000024882	F: GACCAAAGTCCCCTTAATGATG R: TTGACTGTCCGTAGCGTTTG	99	76
mef2db tilapia	ENSONIP00000001942	F: AAAGCCCGCTAAATGACCG R: ATACTGGCACGGTGACTGG	99	83
myod pacu	comp144727_c1_seq4	F: GTTCGTCGTCTTCCTCTTGC R: ACCCGTGCTTTAACACCAAC	101	88
myod1 tilapia	ENSONIP00000013575	F: GACAGCAGCTCTTATTTCTC R: GCTGCTGTTATCGGTGGAGAT	101	83
myod2 tilapia	ENSONIP00000009955	F: GCTCTGATGGCTTGGTGG R: CAATGCTGGACAAACAGTCC	92	80
pik3ca pacu	comp141601_c0_seq36	F: ACGAATGCCAAACCTTATGC R: CGTATCCTCAGGGTGCTGTT	95	83
pik3caa tilapia	ENSONIP00000010535	F: TCTCAGGGCAGAGCAATCG R: TGTCTCAACTGCTCGGTGTC	100	79
pik3cab tilapia	ENSONIP00000013444	F: CTCCCCTGTCAAGTTTCCTG R: CTGTCAGTCAGGGGGTTGTC	95	80
pip4k2aa pacu	comp121239_c0_seq1	F: TTCGTGCTAATGTCTGTCCG R: CGTTAGCCTGTTAGCCTGTCA	98	83
pip4k2ab pacu	comp140051_c0_seq2	F: CACAAGTGAGCACAAAGCG R: GTCTCCCAGCAACAGCCTAA	101	82
pip4k2a tilapia	ENSONIP00000018162	F: TGTCTTCTCTCACCGCCTTT R: ATCTTCTGCCCATCGTTGAT	99	80
raf1a pacu	comp141875_c1_seq33	F: CTAAGCAATGGGCTAGGAATG R: GAATGGTGCTGCTTGTTTTG	98	81
raf1b pacu	comp139101_c4_seq33	F: CCTCAGTAATGGGTTTGGCT R: GAGGAGCGTCGTTGATAAGG	97	78
raf1 tilapia	ENSONIP00000021654	F: CTGCCTTTCTCCGACCATAG R: TGCTGGTTTGGGAGGTAGAC	95	83
rictora pacu	comp144775_c0_seq10	F: GCGGAGTCTCCAGAGTAACG R: CTTCACTGAGCACAGGGTC	96	83

rictorb pacu	comp144775_c0_seq9	F: CGCAACCGCTTTCTTATCTC R: TTAGGGTCGCTGTTGAGCTT	97	83
rictor tilapia	ENSONIP00000013607	F: AAGAGGCTTCAGCAGCAGAG R: AACCTGCGGGGAGTTAGTCT	95	81
rragc pacu	comp138962_c0_seq14	F: GCAACTGAGGGATGAGCTTC R: CACCAGCGAGCTAATGATGA	99	79
rragca tilapia	ENSONIP00000020531	F: CCTTGTTTCTGGAGAGCAC R: GAAGGTGGGGTCAAAGAAGTC	100	80
rragcb tilapia	ENSONIP00000017182	F: GAGGATAGCCCGACATCAGC R: CCTTCTGTATGGAGGATTTGC	97	80
tgfb1a pacu	comp136705_c0_seq7	F: TAGAGGATTGGAAGGGGGTC R: CCAAAGGATACTTCGCCAAC	97	81
tgfb1b pacu	comp139916_c0_seq9	F: CTTGAGGTAAGCTGACTGTGGC R: CAAAGACTTTCGCCTCCAAA	97	80
tgfb1 tilapia	ENSONIP00000007415	F: TGTGGACTTGGAGATGGTGA R: TTCTGCTCCTCATCCTGCTT	100	82
tgfb3 pacu	comp144011_c4_seq32	F: AACAGTCGTCCTTGGTGTCC R: GCAACTTGTCTTGGGCATTT	103	79
tgfb3a tilapia	ENSONIP00000025436	F: CCAGTCCGCCTCAAACAAC R: GTTATCCTGTCCGCAACTCTG	105	81
tgfb3b tilapia	ENSONIP00000019232	F: CCCCTATCAAATCCAAGCG R: TTGTCTTGACCGCAACTCTG	96	79
trim63a pacu	comp145456_c0_seq2	F: ATGTTGCTGTTGTCCATACTCTG R: ATCACATCACCCAGGAGCA	97	82
trim63b pacu	comp142409_c0_seq1	F: GGCTCGGGTCTCTCCTCGG R: CCAGGCGTTACGGAGACC	102	87
trim63 tilapia	ENSONIP00000024115	F: GTTGTCATCCTTCCGTGTCAG R: TCTGAGAGGCGGTAGGTGTTC	96	82
rpl13 pacu	comp141862_c0_seq1	F: ATCAACAGGAAAGTAGCCC R: AGGATGAGTTTGGAGCGGTA	103	82
rpl13 tilapia	ENSONIP00000007470	F: GAATGGAATGATCCTGAACC R: CAGAACGAACCTTGGTATGG	103	85
rpl19 pacu	comp145235_c0_seq2	F: GCAAACTGGTGAAGGATGGT R: CTTGGACTCCCTGTAACGCC	99	87
rpl19 tilapia	ENSONIP00000020477	F: CCCAACGAGACCAATGAGAT R: CGTGCCCTTTCTCTTACCAT	95	83
ppiaa pacu	comp145566_c0_seq1	F: ATTGTGGTTCGTGAAGTCGC R: CCGCTGGGCAGAGTGATTAT	105	85
ppiaa tilapia	ENSONIP00000000799	F: CGGGTCCCAGTTCTTCATC R: GCCGTAGGACTCCATCTTC	105	84
fbxo32 pacu	comp145335_c1_seq5	F: TCTTTGGTGCTCCCCTTGTG R: TAAAACCGAGGACGGCTGG	96	80
fbxo32 tilapia	ENSONIP00000009089	F: CCGAATGGAGAACATCCTG R: GCAGAGTTTCTTCCACAGCA	102	85

F, forward; R, reverse; E, PCR efficiency; Tm, melting temperature.