

Table S6. Species-specific primers used to validate trans-splicing of candidate genes

Primer	Sequence	Annotation Symbol
SxIRH_sim_R6	CACCGTTACTGGTGAAAGCA	CG18350
SxIRH_sim_R5	GGGATTGTTGGTAAAGTTGCTACT	CG18350
SxIRH_sim_R4	GCACCGTTACTGGTGAAAGCA	CG18350
SxIRH_sec-R3	CCGTTGCTGTTGGTGTAAATTAC	CG18350
SxIRH_sec-R2	AATTAATGGCAAAGTGGCCACTA	CG18350
SxIRH_sec-R1	GTGTTCGTCGTGTTAATGTTATTG	CG18350
SxIRH_sec-F2	GCGTGGTTCAGCTAATGTC	CG18350
SxIRH_sec_F1	ACGGCCAAGGCGAAGGCT	CG18350
SxIRH_mel-R3	CCGTTGCTGTTGGTGTAAATTGT	CG18350
SxIRH_mel-R2	AATTACTGGCAAAGTGTCCACTG	CG18350
SxIRH_mel-R1	GTGTTCGACGTGTTAATGTTATTA	CG18350
SxIRH_mel-F2	GCGTGGTTCAGCAAATGTA	CG18350
SxIRH_mel-F1	CATGGCAAGGCGAAGGCG	CG18350
SxIRH_mel_R5	GATTGTTGGGAAAGTTGCTACC	CG18350
SxIRH_mel_R4	GCACCGTTACTGGTAAAAGCG	CG18350
SP1173-SecF	GGGAAAATATATCGAAACGGTGT	CG10121
SP1173-MelR	TCGGTTACTACAACTATCTATATAAAAATCTCAGTAATA	CG10121
SP1173-MelF	GGAAAATATATCGAAACCGTGC	CG10121
SP1173_SecR	CGGTTACTACAAGCTATCTATATAAAAATCTCAGTAATT	CG10121
Ps_SecR	GTTGCTTTGCTTCTGGTTTATTTT	CG16765
Ps_SecF	GCGAATAACGAGTAAAAGTTAAAAAGTTG	CG16765
Ps_MelR	TGCTGTGCTTCTGGTTTTTTTT	CG16765
Ps_MelF	CGCATAACGAGTAAAAGTTAAAAAGTCA	CG16765
ome-SecR	CGTGGCCAACAGAGCAAG	CG42280(CG32145)
ome-SecF	GCGGATCCGGATTCCCTT	CG42280(CG32145)
ome-MelR	CCGTGGCCAATAGAGCAAC	CG42280(CG32145)
ome-MelF	GCGGATCCGGATTCCCTC	CG42280(CG32145)
Fau_SecR2	GAGGTTACCACGCGGATC	CG6544
Fau_SecR1a	CCGCTGGTGGTTCGAG	CG6544
Fau_SecR1	CTTTGACGCAGTGCCTCC	CG6544
Fau_SecF2a	AAAATCCAACGAACAATTCTATT	CG6544
Fau_SecF2	CCAAAATCCAACGAACAATTCTATC	CG6544
Fau_SecF1	CAAAGCATCCAAATCTAAAAATCG	CG6544
Fau_MelR2	GAGGTTACCACGCGGATG	CG6544
Fau_MelR1a	CCGCTGGTGGTTCGAA	CG6544
Fau_MelR1	CCTTTGACGCTGTGCGTCT	CG6544
Fau_MelF2	CCAAAATCCAACGAACAATTCTATT	CG6544
Fau_MelF1	TCTCAAAGCATCCAAATCTAAAAATCT	CG6544
CG9432-SR	ATCTTCTCAAACATCTTGCGGTTT	CG9432
CG9432-SF	CAACGACAAACGACTAGCCAAAG	CG9432
CG9432-MR	CTTCTCGAACATCTTGCGGTTA	CG9432
CG9432-MF	CAACGACAAACGACTAGCCAAA	CG9432
CG7449-SR2	ATCCTTGGTCCACTGGACTTTT	CG7449
CG7449-SR1	CCGCCCGGTTTCGAC	CG7449
CG7449-SF	CCAAGCCTAGAATTGGCTAGAGC	CG7449
CG7449-MR2	CCTTGGTCCACTGGACTTTG	CG7449
CG7449-MR1	CCGCCCGGTTTCGAT	CG7449

CG7449-MF	CAAGCCTAGAATTGGCTGGAGT	CG7449
CG7437-SR	TCTGTATCGCAGCAGTTGTTG	CG7437
CG7437-SF	GTGAAGTAACATTCCGGCAAG	CG7437
CG7437-MR	GTCTGTATCGCAGCAGTTGTCT	CG7437
CG7437-MF	GTGAAGTAACAATCCGGCAAA	CG7437
CG5803-SR2	CGCCTTTTGAGATTTTGTGCAT	CG5803
CG5803-SR1	CCTCCGGTGTTGTTGTTGC	CG5803
CG5803-SF	GCTACTCCGCGTATGAGCCT	CG5803
CG5803-MR2	GCGCCTTTTGAGATTTGTGTAAC	CG5803
CG5803-MR1	CTCCGGCGTTGTTGTTGT	CG5803
CG5803-MF	TACTCGGCGTATGAGCCG	CG5803
CG42235-SR3	GCCAAAATGGAACCAAACATC	CG42235
CG42235-SR2	CCGCCCTCCTGATTGATT	CG42235
CG42235-SR1	GCAAATAAACTGGTCAGGGGT	CG42235
CG42235-SF	CATTTCCGGGAGCCATTTCA	CG42235
CG42235-MR3	GCCAAAATGGAACCAAACATA	CG42235
CG42235-MR2	CGTCCGCCCTCTTGATTAATC	CG42235
CG42235-MR1	AATACAAATAAACTTGTACGGGC	CG42235
CG42235-MF	CCATTTCCGGGAGCTATTTCCG	CG42235
CG32062-SR	GTCAATCCTCCGGCGTT	CG32062
CG32062-SF	GATAAATAATCAAAAATTCAAATCAAATTGAAAT	CG32062
CG32062-MR	GTCAATCCTCCGGCTGC	CG32062
CG32062-MF	GATAAATAATTAATAAAATTCAAATCAAATTGCAAG	CG32062
CG32045-SR	CACGCACATCCTCCCGT	CG32045
CG32045-SF	GCTGTCCTCGAGTGGAGGTG	CG32045
CG32045-MR	GCACGCACATCCTCTCGA	CG32045
CG32045-MF	GGCTGTCCTCGAGTTGAGGTT	CG32045
CG31324-SR	CCGAGTAGCGGTCCTCGTT	CG31324
CG31324-SF	AAACAAATAGGAAAATATACGGAAAATAAAAGC	CG31324
CG31324-MR	CGAGTAGCGGTCGTCTGC	CG31324
CG31324-MF	GAAAACAAATACGAAAAATACAGAAAATAAGAAG	CG31324
CG18466-SR	CTCGTTGATGTGCTCTGGC	CG18466
CG18466-SF	GCTTACAATATTTAACGAGCTTAAAAGTGTATC	CG18466
CG18466-MR	CTCATTGATGTGCTCGGGT	CG18466
CG18466-MF	GTGTTGCAATATTTAACGAGCTTAAAAGTATATT	CG18466
CG1637_SecR	CCAGATCCTTCAGCTCCACC	CG1637
CG1637_SecF	GACTGTGTTACAGTGCAATAACAAC	CG1637
CG1637_MelR	TCCAGATCCTTCAGTTCCACA	CG1637
CG1637_MelF	GCGTTACTGTGCAACAACAAC	CG1637
CG15899-SR	CGAATCGTTCGTATGGCAGTT	CG15899
CG15899-SF	GGGCGCTGACGCAATATC	CG15899
CG15899-MR	CGAATCGTTCGTATGGCAGTC	CG15899
CG15899-MF	GGCGCTGACGCAGTACA	CG15899
CG14080-SR	CTAAGACCCATTAGCTGATCGGTC	CG14080
CG14080-SF	TGGCTGCAGTCGCAGC	CG14080
CG14080-MR	CCTAAGACCCATTAAGTATCGGTT	CG14080
CG14080-MF	GAGTGGCTGCAGTCCAGT	CG14080
CG12789-SR	CACGCTGGGCTGGGATA	CG12789
CG12789-SF	GGCCTCTGGCAAAGAAATCC	CG12789

CG12789-MR	CTCACGCTGGGCGATG	CG12789
CG12789-MF	GGCCTCTGTGCAAAGAAATCA	CG12789
Lola_MelF	GGACCAAACCTCGGCCAC	CG12052
Lola_SecF	GGACCAAACCTCCGCCAG	CG12052
Lola_RF_MelR	GGAGAACTTGAGCTCGTACCAA	CG12052
Lola_RF_SecR	CGGAGAACTTGAGTTCGTACCAG	CG12052
Lola_RJ_MelR	CCCGGTTCGAATTTGATC	CG12052
Lola_RJ_SecR	CCCGGTTCGAACTTGATG	CG12052
Mod_melF	GCTACGACGACAGCTACTTCACT	CG32491
Mod_SecF	GCTACGACGATAGCTACTTCACG	CG32491
Mod_RAA_MelR	CGGATTGATTTTATTGACTTTATGTGA	CG32491
Mod_RAA_SecR	GGATTGATTTTATTGACTTGATATGG	CG32491
Mod_RJ_MelR	AAAGTCGGCCGGTTTTAATATG	CG32491
Mod_RJ_SecR	AAAGTCGGCCGATTTTCATATA	CG32491