

## Files S1-S3

### Sequence Files

Files S1-S3 are available at <http://www.g3journal.org/lookup/suppl/doi:10.1534/g3.111.000927/-/DC1> or the links listed below.

Sequence File S1: reads over putative junctions of MAC-destined and MIC-specific sequence, maximally inclusive (not restricted for multi-mappers) [http://bioshare.bioinformatics.ucdavis.edu/Data/k6pd8efvnnv/all\\_windows.html](http://bioshare.bioinformatics.ucdavis.edu/Data/k6pd8efvnnv/all_windows.html)

Sequence File S2: reads aligned near MAC contig edges

[http://bioshare.bioinformatics.ucdavis.edu/Data/k6pd8efvnnv/windows\\_at\\_edges\\_of\\_contigs.html](http://bioshare.bioinformatics.ucdavis.edu/Data/k6pd8efvnnv/windows_at_edges_of_contigs.html)

Sequence File S3: non-mapper reads

[http://bioshare.bioinformatics.ucdavis.edu/Data/k6pd8efvnnv/putative\\_ies\\_seqs\\_unmapped.fasta](http://bioshare.bioinformatics.ucdavis.edu/Data/k6pd8efvnnv/putative_ies_seqs_unmapped.fasta)

**Sequence File S4: short IES sequences**

Sequence included in the SB210 MAC genome is in black, IES sequence is in blue, and directly repeated IES-flanking sequence retained in single copy at the MAC junction is in red and underlined.

**IES 1**

TTGTTACTGTGATTGTAAATTAGGAATATTTTATTAACATTTTGCATCCTAAATTTTAAGATTAGAATTCGTTTA  
ATTAGTAATCTTAATTCACATTTTAGTTTATATCATATCCTTAATTTGCCATATAATTATAATTAGTTTAACTATAA  
TTATTATCTGCATTATTAACTCTTTATTTTATTTTAAATTAATAAAAAATCACTTTTTTATTTTACAAAAATTTT  
ATATAAAATTTACATATAACGAAAAGATAAATACAAATACAAAAGCAAAATACAAAATTTTTTTGAAAAATTTATTA  
AAAAATTCATTTAATTTTAAAATTTCTTAACTTCTCCTTATTGTCGTGAAAGTGTTAATGGGTTTCGTATAACTAAG  
AATTATAATTCAAATCTTAATTAATCTAGCTCTGTTGATTATTAAGTATTAGTTGCTAGGTTTCGTTTATTAACCA  
GTAACGCATAAGGTTAACATTTTAAATTAGCATTTTGTGGTTAAAATAAGTATCATTACTGTTAGAGTTATTTTG

**IES 2**

AAAGGCGGTCGCGACATCGATGTGTTTTTATTAATTGTTGTTATTTTTATTTGTTTAGTTTTATATTTTAGAAGTCT  
CTTTGTTCTCTTCTCACACATTACGGTTTTCTTGCTTTTAGTAATAATATTTTTAGAAGATTAATTTGAAGATTA  
TCTTTATCTTTATTAACACTTCAATTAATTTCTTTTTTTATTTTATTGATTCATCATCTGAACATTA  
TTAAATAAAAATATTAATAATAAATCAATAAATAAATGCGCAAAATAAATGAATAGGTTGGTTGGTTACCTATC  
TGGTCTATTAATGGAAGTTTCTGTAATGTGAAACATTTACTGATTCGTAATCTGTATCGTGTGCTTACATTTTGA  
CAATTTGATTACAACAGTAGCATCTTTTTGTTTTTCTGTTTCTTATTTTATACTAGCTGGTTAGCTAAATTTTAT  
TTTTTCACTTAATCTTTTTTTCATCATCTTTGTCCTTGCTTTTTTGCATCTGAATTTTTCTATTAATTTTTTAAAA  
TGAAATTTTCAATTTTGAATTTTTTAAAAAATTTTTAAAAAATTAACCCCTGTTTTTTAAATTTGGTTTTGGAA  
GTGTTAATTAGGGTAATCGTTAATTAATATTTTATGAATTTACAGTATTTAACCCAGCTGTATTGGATGTCTAGTG  
AGAGTTGGCGTTCTGTAAATTTTTGTAATAAATCCATTTAAGCTAGCAGCCTGATTCAGGTTTCATGAGATTAGTAT  
TTTAAATGATACTTATGCCAGATCCATTCTGGACGTTTGCAGGAAAATTAATTTAAGGATATTTAAATGG

**IES A**

GAGATCGATAGCTATAAGAAAATGATATATGAAAGACTGGCAGTGACAAATCCGCTGAAGGTAGAAAATATGGCCAT  
GATGCAATCAATGTTCAAAATGGTTAATTAATTAATCCATTGATTATTTTAAATAGAGTTAGATTATTTCTAATACATA  
AGCTATTTTCAGAAAAATATTTCTCGAGTTAGAAATATAGACATAGTAAAAATAAGAAAATATTATTAATATAATATT  
AAAAAAAATAAAATAAATTAAAAAAAGGTTTTGAAACAGGTTTCGAACCTGATAGAAGAAAAAATAAAAAATGTTT  
AATCAAAATTTAATTTTTTTGATGAAGAAATTTAAATTTTTTACATCAAACATTTAATCTTGAATTAATTTTTTTTT  
TACATTCAAAATGAATGAAAAAAGGCTTAACCTCGAAAAATTAATGTTGATTAAAAATTTTGATTTCCCTCATCAA  
AATATTAATCTTTGATTAAACATTTTTTATTTTTTTTTGTTAGTTCAGGTTTCGAAACCTCTTTTCGATACCTTTTTTT  
ATTATTTTAAATATACATTAATTTTTTAAAAATAATTTTTATTATCTACTAAATATTTATTTCTACTACAGAAATA  
ATTATCCGAGAATAGCAATAATCTTACTCTCTGTATGAAGTAGTAATGAAGAAGAAATTAAGAACTATCTGTATG  
CTTAAATAAATTAAGCAATCTAATAATTAATCTTAAATGTATTAGCTAGGTTTGA

**IES B**

AGCAGAGAATTTACTAGATGGTTTACTCATTAACACTATCTAATCTTGATTTAAATTTTTTTGAAAAAATATTCAA  
TTTTTTAAAAAACTCTTCAAAAATCAAAAATTTTTTAAATTTTATTTAAGTAAAAAATAAATAAACTTTAAAATA  
TTTTGCTTATAAAATCTGTTAAGTAACTGACTACATTATGTATAAAGAAGATGATTAACACAAAATAATTTTATTA  
GTTAATTGGGATTTCAATTCAGAATATTCAATTTTTGATCATTAGTACATCAATATATTGAGTCTCTCGCTATT  
TTTGATTAATAATAAAAAATAAATTAATTTGAAATTAATTAAGTGTTAAATTGGATGATTAATTAATCTATCCA  
TAGGAAGAAGATGATGATGTGGAGGATTAATCTTTGAAATATGAACCTGAATTAATTAAGAAATTTGAAGAATACTT  
GTTAACGTTGTATAATGAGAAGATCCATTAGAATGCGGTTTCTGGGCTTTTTGTGCGATTATATTTATCCCATC

Sequence File S5: RT-PCR product sequences for the IES-containing *LIA2* mRNA 3' end

Unspliced mRNA:

GAGGTTTGGATGTTAAGGATGTCTCCACGTATTTAATTACGATTTCCCAAAGGTTATGGAAGACTATGTCCATAGAATCGGTAGA  
ACAGGTAGAGCTGGAGCATATGGTTGTGCAGTATCTTTCCTTACTTTTGAAAGATGATAAAAAGATATCAAGGGAATATGTC CAAAT  
GCTTCATGACGCTAAGTAAGAAATTTCCATTGATCTTCTTGATCTTGCTAGTATTAATCCAGATACAGAACTTAATATAAACTG  
TTTCTCTTCATACTATGATATTAAGAAATTTAACAGTGC TGATACTTCAAAGCCTTCAGAAGATCAGAATGTTTCAAATACTGCA  
AATAGCAGCGACAAGTACACCAGCAGTAGCAGCTACAATTAATAAAAAGCAAAAAGATGAAGATGACAAGAGAAGTAGAAGTAG  
AAGTCCATATAAACTGAAAATAACAACAGATGGGATAAATAAATCGCACAAAAGCCAGAATACCGCAGTTCTAATGGATCTT  
CTCATTATAACAACGTTAACAAGTATTCTTCAAATTCTAATAATAATTCAGTTTCATATTCAAAGAATTAATCCTCCACATCATCA  
TCTTCTTCTATGGATAGAATAATTAATCATCCAATTTAACACTTTAATTAATTTTCTTAAATTTTAAATTTTATATTTTAAATCA  
AAAATAGCGAGAGACTCAATAATATTGGTATGACTGAATGATCAAAAATGAATATTCTGAATGAAATCCCAATTAATACTAATAAA  
ATTATTTTGTGTTAATCATCTTCTTTATACATAATGTAGTCAGTTTACTTAAACAGATTTTATAAGCAAAAAAAAAAAAAAAAAA

Spliced mRNA:

GAGGTTTGGATGTTAAGGATGTCTCCACGTATTTAATTACGATTTCCCAAAGGTTATGGAAGACTATGTCCATAGAATCGGTAGA  
ACAGGTAGAGCTGGAGCATATGGTTGTGCAGTATCTTTCCTTACTTTTGAAAGATGATAAAAAGATATCAAGGGAATATGTC CAAAT  
GCTTCATGACGCTAAGTAAGAAATTTCCATTGATCTTCTTGATCTTGCTAGTATTAATCCAGATACAGAACTTAATATAAACTG  
TTTCTCTTCATACTATGATATTAAGAAATTTAACAGTGC TGATACTTCAAAGCCTTCAGAAAATCAGAATGTTTCAAATACTGCA  
AATAGCAGCGACAAGTACACCAGCAGTAGCAGCTACAATTAATAAAAAGCAAAAAGATGAAGATGACAAGAGAAGTAGAAGTAG  
AAGTCCATATAAACTGAAAATAACAACAGATGGGATAAATAAATCGCACAAAAGCCAGAATACCGCAGTTCTAATGGATCTT  
CTCATTATAACAACGTTAACAACGAGAGACTCAATAATATTGGTATGACTGAATGATCAAAAATGAATATTCTGAATGAAATCCC  
AATTAATACTAATAAAATTTTGTGTTAATCATCTTCTTTATACATAATGTAGTCAGTTTACTTAAACAGATTTTATAAGCAAAAT  
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

Table S1 Primers

Primer	Sequence	Uses
<b>IES 1:</b>		
Win1_3369L-141	CCAACAAAATGCTAATTTAAAATGG	A,B
Win1_3369R-62r	TCATATCCTTAATTTGCCTCATA	A,B
Win1_3369R_junc	GAACCCATTAACACTTTCACGA	B
<b>IES 2:</b>		
win1_8019L-126	CAGGCTGCTAGCTTAAATGGA	A,B
win1_8019R-77r	TCACACATTACGGTTTTCTTGC	A,B
win1_8019IES+19	TTTTTATTGATTCTCATCATCTGAAC	B
win1_8019R_junc	CCCTAATTAACACTTCCAAAACCA	B
<b>IES 3:</b>		
win1_12075R-130	TTGGACCTGATTATTCACCTG	A
win1_12075L-64r	TTGGATCCTCTATTATAACCTCCA	A
<b>IES A:</b>		
IES5_MDSL-124	TGAAAGGCTGGCTGTGATAA	A,B
IES5_MDSR-166	CTGCGAATTTGCCTGAGATT	A
IES5_JuncR1	AGAGTAAGATTATTGCTATTCTCGGA	B
IES5_N_up	TGGCTCTCCTTCTGTTCCAC	C
IES_N_down	GGCAAATTCGACGCTTCTTA	C
<b>IES B:</b>		
IES7_MDSL-112	GGATTGATTGGCATAAATGGA	A,B
IES7_MDSR-158	AAGCCCAGAATACCGCAGTTC	A,B,C
LIA2_N_UP2	AGTTCAAAGCGGAGAATGC	C
Lia2_N_up2Sall	AATTAGTCGACAGTTCAAAGCGGAGAATGCAG	D
Lia2_N_upNestSall	AATTAGTCGACGAGGTTTGGATGTTAAGGATGTC	D
<b>IES C:</b>		
IES1_MDSL-110	TGGAAGATCTACTTCAAAGCGAAT	A,B
IES1_MDSR-31	CCAGCTAGACACCCTGTATCAA	A,B
IES1-MDSL-110Kpn	ATAGGTACCTGGAAGATCTACTTCAAAGCGAAT	A
IES1-MDSR-31Apa	ATAGGGCCAGCTAGACACCCTGTATCAA	A
IES1_N_up1619	TTTTCTGTTGAAAAACCTTACA	C
IES1_N_down2210r	TCCACTTCTACCCAAAAACA	C
IES1_N_up1619Sall	AATTAGTCGACTTTTCTGTTGAAAAACCTTACAAGTGC	D
IES1_N_upNest	GCCTCTATATGTTACAAATAGCTC	D
IES1nestIES(rev)	GGTTGGAGATGCTATTAGCTC	D: No product
IES1nest(rev)	CAGAAATTTACCAGCTAGACAC	D
<b>IES D:</b>		
IES11_MDSL-42	GGCCACAATATACTAAGGCAATTT	A,B
IES11_MDSR-34	GGCCACCTTGATACCAATTT	A,B
<b>IES E:</b>		
IES4_MDSL-40	TTTCCAAAAATAAGTTTTTCATTGAG	A
IES4_MDSR-67	CATACGTTTGAATAAGGAGGGTTT	A,B
IES4_IESL120	GAGAAAAATGGAAATAGAGCATGA	B
<b>IES F:</b>		
IES12_MDSL-22	CAGGGTAGCTGCCATTTCTC	A
IES12_MDSL-359	ATTGCTTAAGAATTCAAATAAAAAGA	A
<b>IES G:</b>		
IES2_MDSL-30	TATCAAGCCGCTAAGCCAAG	A
IES2_MDSR-67	ACCTTAAAATCTTAAAATGGATGACTC	A

Uses: A, MAC junction PCR; B, IES amplification; C, hybridization probe template; D, RT-PCR