Supplementary information:

Supplementary information Figures S1-S4 and Table S1-S5.

Efficient Production of Gene-Modified Mice using *Staphylococcus aureus* Cas9

Xiya Zhang[1,2,#], Puping Liang[1,2,3,#], Chenhui Ding[3,#], Zhen Zhang[2], Jianwen Zhou[4], Xiaowei Xie[2], Rui Huang[2], Ying Sun[2], Hongwei Sun[2], Jinran Zhang[2], Yanwen Xu[3], Zhou Songyang[1,2,3,*], Junjiu Huang[1,2,3,*]

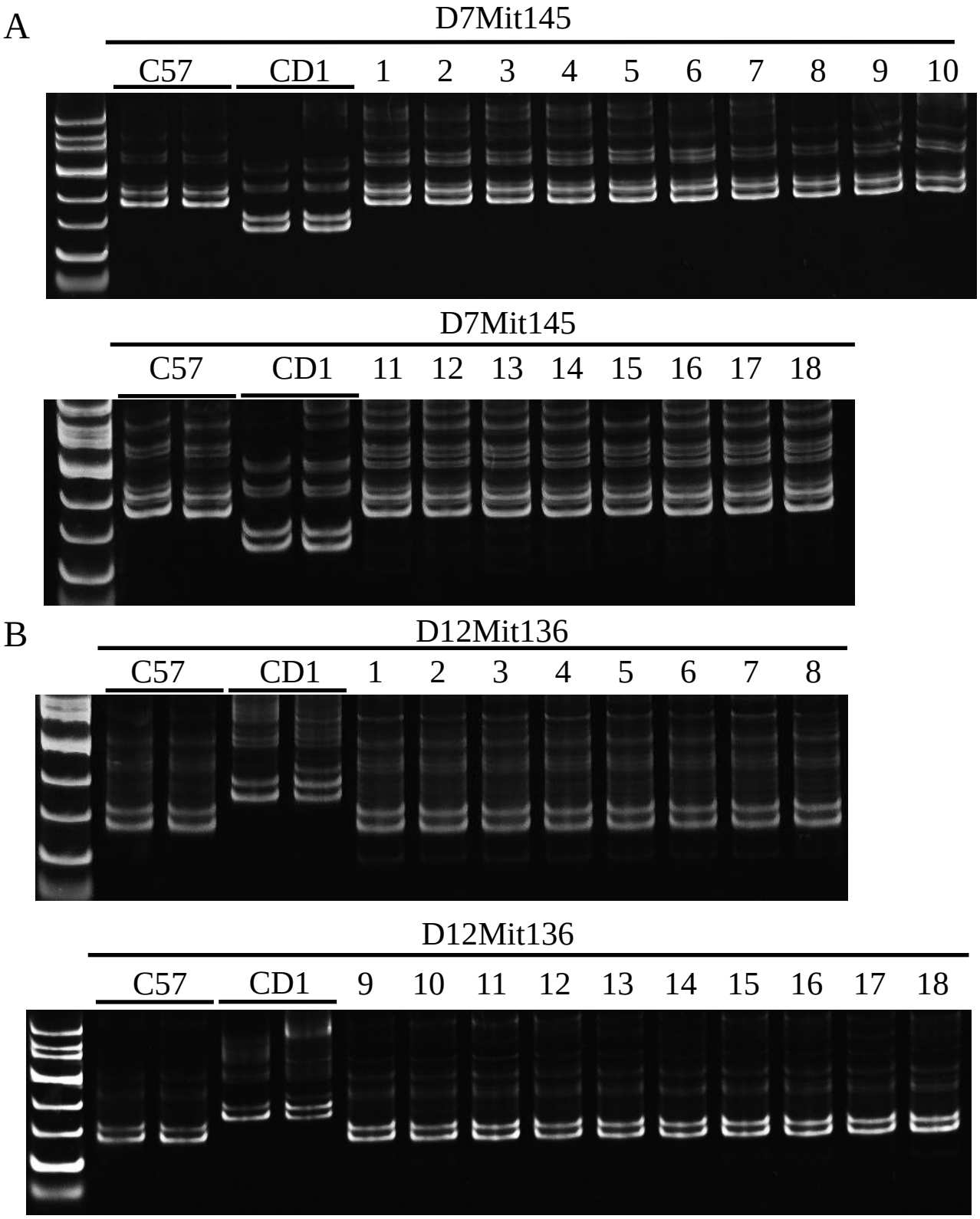
[1]State Key Laboratory of Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, 510275, China.

[2]Key Laboratory of Gene Engineering of the Ministry of Education, Guangzhou Key Laboratory of Healthy Aging Research and State Key Laboratory of Biocontrol, SYSU-BCM Joint Research Center, School of Life Sciences, Sun Yat-sen University, Guangzhou, 510275, China

[3]Key Laboratory of Reproductive Medicine of Guangdong Province, School of Life Sciences and the First Affiliated Hospital, Sun Yat-sen University, Guangzhou, 510275, China

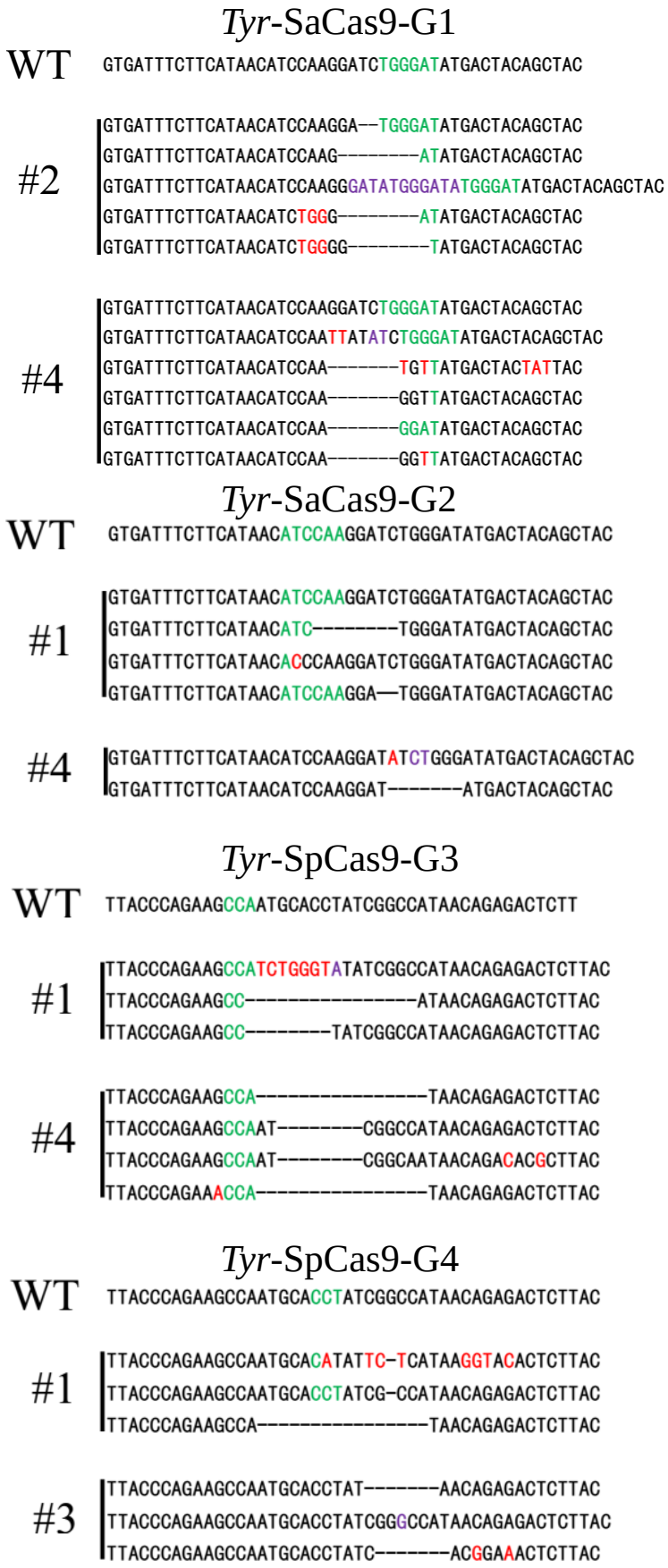
[4]Department of Pathology, First Affiliated Hospital, Sun Yat-sen University，Guangzhou, 510080, China

Supplementary information, Figure S1



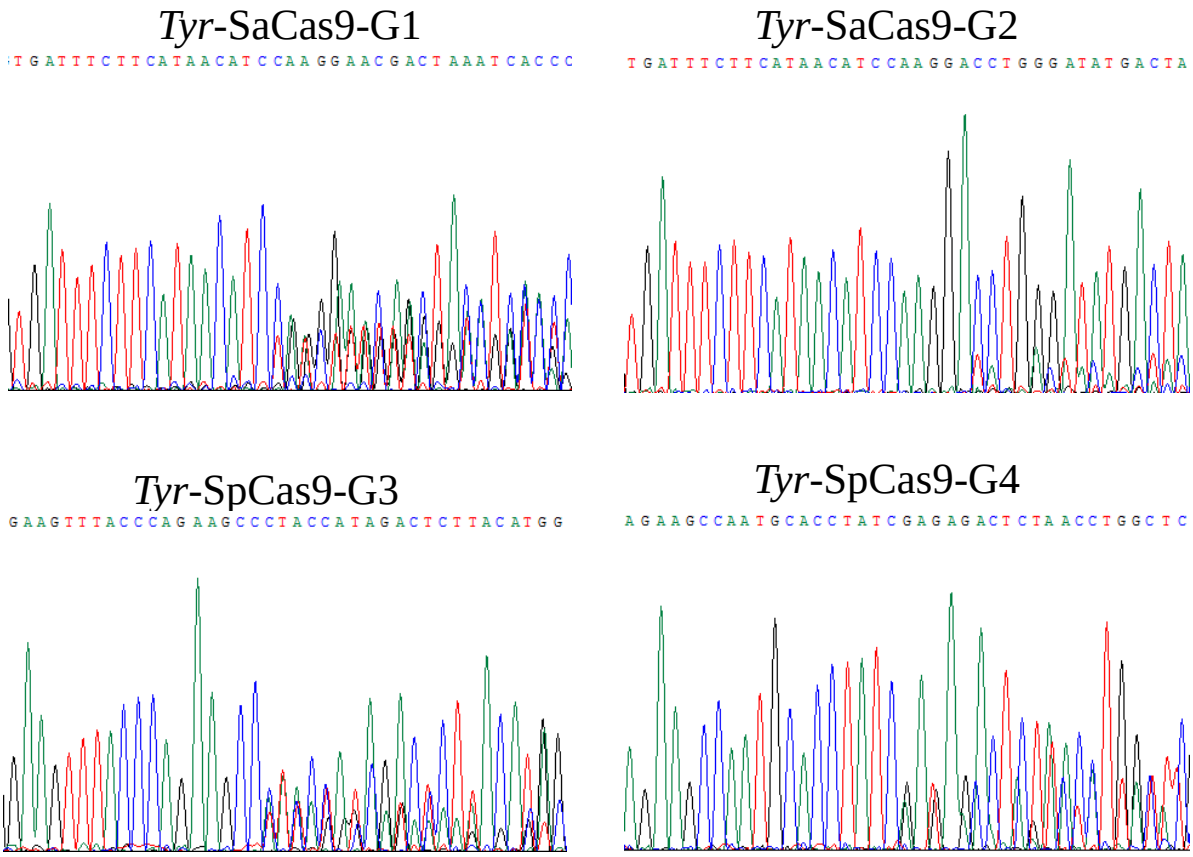
Microsatellite analysis confirmed that the albino and mosaic founders were C57BL/6J mice. (A) D7Mit145 sites, from albino and mosaic founders, were amplified by PCR and then electrophoresis on 10% PAGE gel. (B)Microsatellite analysis using D12Mit136 site to confirm the albino and mosaic founders were C57BL/6J.

Supplementary information, Figure S2



The sequence of mutant alleles in *Tyr* mutant founders. PAM sequence and truncated PAM sequence are labeled in green. Mutant base is labeled in red, and inserted base is in purple.

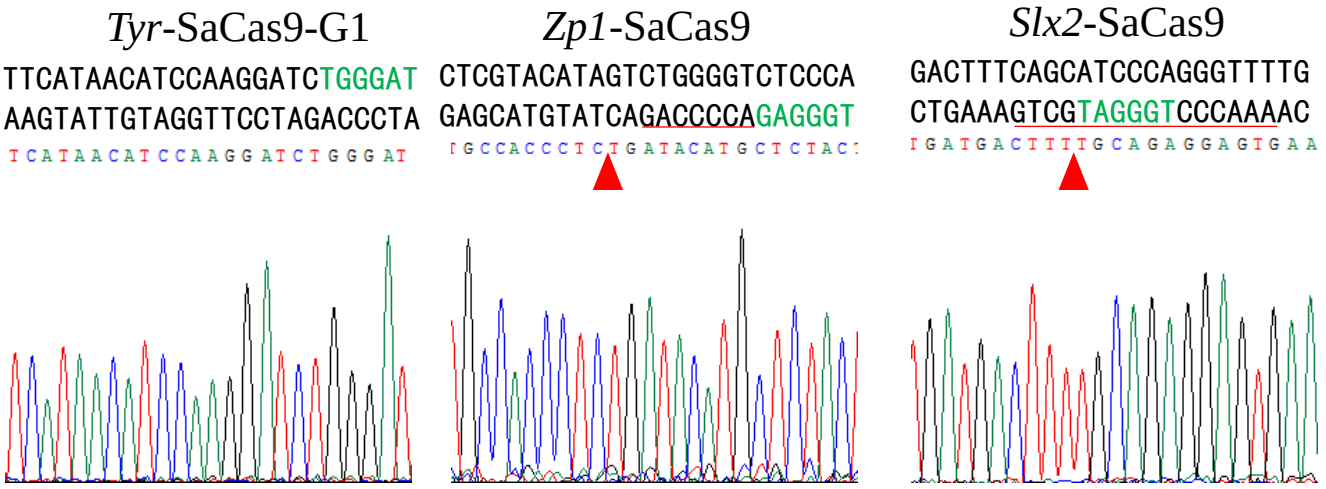
Supplementary information, Figure S3.



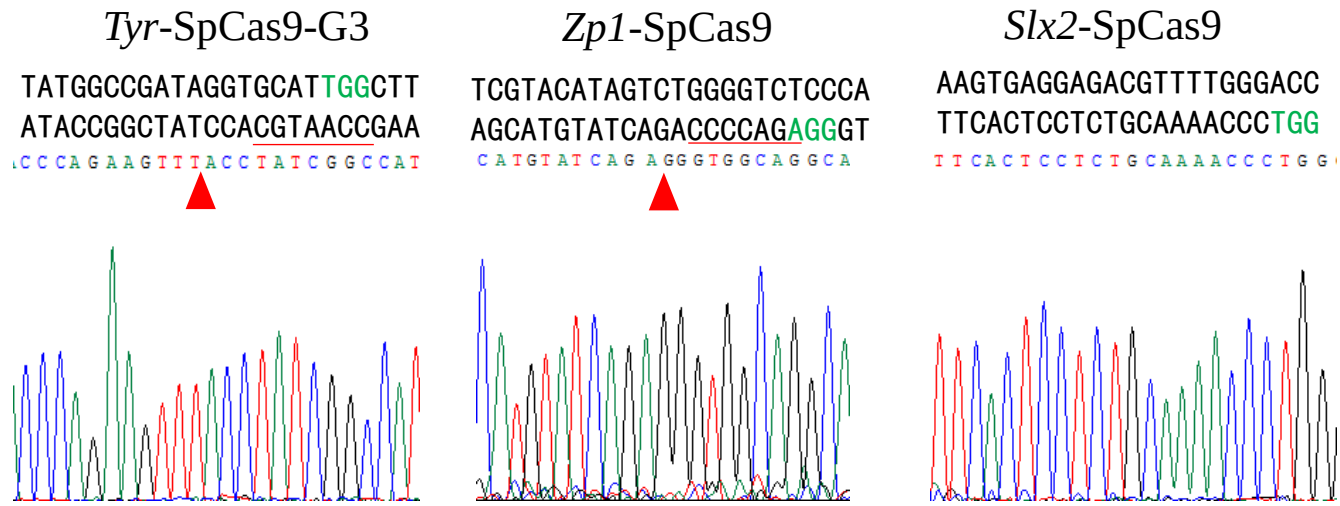
Sanger sequencing to confirm *Tyr* knock-out founder mice. Representative sequencing results showed double peaks near the PAM sequence of target sites.

Supplementary information, Figure S4.

A



B



Sanger sequencing to confirm the genotype of multiplex targeted embryos. Sites where some base pairs are deleted are indicated by red triangle, and the deleted base pairs are underlined with red line.

(A) Sanger sequencing to confirm the genotype of #9 embryo of SaCas9.

(B) Sanger sequencing to confirm the genotype of #8 embryo of SpCas9.

Supplementary information Table S1

Single gene disruption efficiency of multiplex gene disruption in mouse embryos by SaCas9 and SpCas9

	Slx2 -targeted embryo No. (%)	*Zp1* -targeted embryo No. (%)	Tyr-targeted embryo No. (%)
SaCas9	17/30 (56.7%)	27/30 (90%)	23/30 (76.7%)
SpCas9	5/37 (13.5%)	29/37 (78.4%)	14/37 (37.8%)

Supplementary information Table S2

Primers used for in vitro transcription of gRNA and saCas9 mRNA

T7-saCas9-FP	TAATACGACTCACTATAGGGAGAATGGCCCCAAAGAAGAAGC
T7-saCas9-RP	TTAGGATCCCTTTTTCTTTTTTGC
SaCas9-gRNA-RP	AAAAATCTCGCCAACAAGTT
SLX2-SaCas9-gRNA-FP	TGTAATACGACTCACTATAGGCCTTCACTCCTCTGCAAAACCCGT TTTAGTACTCTGGAAACAGAATC
ZP1-SaCas9-gRNA-FP	TGTAATACGACTCACTATAGGTAGAGCATGTATCAGACCCCAGTT TTAGTACTCTGGAAACAGAATC
Tyr-SaCas9-G1-FP	TGTAATACGACTCACTATAGGTCTTCATAACATCCAAGGATCGTTTTAGTA CTCTGGAAACAGAATC
Tyr-SaCas9-G2-FP	TGTAATACGACTCACTATAGGCTGTAGTCATATCCCAGATCCGTTTTAGTA CTCTGGAAACAGAATC
SLX2-SpCas9-gRNA-FP	TAGGTTCACTCCTCTGCAAAACCC
SLX2-SpCas9-gRNA-RP	AAACGGGTTTTGCAGAGGAGTGAA
ZP1-SpCas9-gRNA-FP	TAGGAGCATGTATCAGACCCCAG
ZP1-SpCas9-gRNA-RP	AAACCTGGGGTCTGATACATGCT
Tyr-SpCas9-G3-FP	TAGGTTATGGCCGATAGGTGCAT
Tyr-SpCas9-G3-RP	AAACATGCACCTATCGGCCATAA
Tyr-SpCas9-G4-FP	TAGGAGTCTCTGTTATGGCCGAT
Tyr-SpCas9-G4-RP	AAACATCGGCCATAACAGAGACT

Supplementary information Table S3

Primers used for single embryo PCR

ZP1-T7E1-FP	CCTCTGCTCACCCACCTCT
ZP1-T7E1-RP	GCATCCTCAAAGCCCACT
SLX2-T7E1-FP	CACCCCAACAGAGGAAGAAC
SLX2-T7E1-RP	TTTCACAGACTTTTGGCAACTT
Tyr-T7E1-FP	ACACTACTTCTGATGAATGACCTT
Tyr-T7E1-RP	AAATTGGCATAATATAGTTTCTTTA

Supplementary information Table S4

Primers used for microsatellite analysis

D7Mit145-FP	CAGGTGACCTTGGTCATGG
D7Mit145-RP	AGAGCCCAGGGGTTTTAAGA
D12Mit136-FP	TTTAATTTTGAGTGGGTTTGGC
D12Mit136-RP	TTGCTACATGTACACTGATCTCCA

Supplementary information Table S5

Primers for deep sequencing analysis of off-target sites

ZP1-target-1-FP	TAGATCGCAACTGTCTGGCCTCCAACC
ZP1-target-1-RP	CTCTCTATTGCTCACCCACCTCTCTCC
ZP1-target-2-FP	TATCCTCTAACTGTCTGGCCTCCAACC
ZP1-target-2-RP	AGAGTAGATGCTCACCCACCTCTCTCC
ZP1-target-3-FP	GTAAGGAGAACTGTCTGGCCTCCAACC
ZP1-target-3-RP	ACTGCATATGCTCACCCACCTCTCTCC
ZP1-target-4-FP	AAGGAGTAAACTGTCTGGCCTCCAACC
ZP1-target-4-RP	CTAAGCCTTGCTCACCCACCTCTCTCC
ZP1-target-5-FP	CGTCTAATAACTGTCTGGCCTCCAACC
ZP1-target-5-RP	TCTCTCCGTGCTCACCCACCTCTCTCC
ZP1-target-6-FP	TCGACTAGAACTGTCTGGCCTCCAACC
ZP1-target-6-RP	TTCTAGCTTGCTCACCCACCTCTCTCC
ZP1-target-7-FP	CCTAGAGTAACTGTCTGGCCTCCAACC
ZP1-target-7-RP	GCGTAAGATGCTCACCCACCTCTCTCC
ZP1-target-8-FP	CTATTAAGAACTGTCTGGCCTCCAACC
ZP1-target-8-RP	AAGGCTATTGCTCACCCACCTCTCTCC
ZP1-target-9-FP	GAGCCTTAAACTGTCTGGCCTCCAACC
ZP1-target-9-RP	TTATGCGATGCTCACCCACCTCTCTCC
ZP1-target-10-FP	TCGCCTTAAACTGTCTGGCCTCCAACC
ZP1-target-10-RP	CTAGTACGTGCTCACCCACCTCTCTCC
ZP1-sp-OT1-1-FP	TAGATCGCACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-1-RP	CTCTCTATAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-2-FP	TATCCTCTACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-2-RP	AGAGTAGAAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-3-FP	GTAAGGAGACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-3-RP	ACTGCATAAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-4-FP	AAGGAGTAACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-4-RP	CTAAGCCTAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-5-FP	CGTCTAATACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-5-RP	TCTCTCCGAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-6-FP	TCGACTAGACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-6-RP	TTCTAGCTAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-7-FP	CCTAGAGTACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-7-RP	GCGTAAGAAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-8-FP	CTATTAAGACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-8-RP	AAGGCTATAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-9-FP	GAGCCTTAACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-9-RP	TTATGCGAAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT1-10-FP	TCGCCTTAACAGCCAGGGCTATACAGAGAAA
ZP1-sp-OT1-10-RP	CTAGTACGAAGAAAGAAAGAAAGAAAGAAAGCAA
ZP1-sp-OT2-1-FP	TAGATCGCTAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-1-RP	CTCTCTATAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-2-FP	TATCCTCTTAAATTCCTGATGGCTGTCAATG

ZP1-sp-OT2-2-RP	AGAGTAGAAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-3-FP	GTAAGGAGTAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-3-RP	ACTGCATAAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-4-FP	AAGGAGTATAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-4-RP	CTAAGCCTAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-5-FP	CGTCTAATTAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-5-RP	TCTCTCCGAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-6-FP	TCGACTAGTAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-6-RP	TTCTAGCTAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-7-FP	CCTAGAGTTAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-7-RP	GCGTAAGAAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-8-FP	CTATTAAGTAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-8-RP	AAGGCTATAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-9-FP	GAGCCTTATAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-9-RP	TTATGCGAAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT2-10-FP	TCGCCTTATAAATTCCTGATGGCTGTCAATG
ZP1-sp-OT2-10-RP	CTAGTACGAGTTCCTTCCAAAATAGCTTGCT
ZP1-sp-OT3-1-FP	TAGATCGCTGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-1-RP	CTCTCTATACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-2-FP	TATCCTCTTGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-2-RP	AGAGTAGACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-3-FP	GTAAGGAGTGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-3-RP	ACTGCATACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-4-FP	AAGGAGTATGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-4-RP	CTAAGCCTACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-5-FP	CGTCTAATTGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-5-RP	TCTCTCCGACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-6-FP	TCGACTAGTGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-6-RP	TTCTAGCTACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-7-FP	CCTAGAGTTGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-7-RP	GCGTAAGACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-8-FP	CTATTAAGTGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-8-RP	AAGGCTATACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-9-FP	GAGCCTTATGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-9-RP	TTATGCGACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT3-10-FP	TCGCCTTATGACTTTGAGTTTTTCACTTATTCAC
ZP1-sp-OT3-10-RP	CTAGTACGACTAGGAGCTAACCTGCTATGTTG
ZP1-sp-OT4-1-FP	TAGATCGCGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-1-RP	CTCTCTATGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-2-FP	TATCCTCTGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-2-RP	AGAGTAGAGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-3-FP	GTAAGGAGGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-3-RP	ACTGCATAGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-4-FP	AAGGAGTAGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-4-RP	CTAAGCCTGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-5-FP	CGTCTAATGTGGAAACAAGACTTGGTGTATC

ZP1-sp-OT4-5-RP	TCTCTCCGGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-6-FP	TCGACTAGGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-6-RP	TTCTAGCTGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-7-FP	CCTAGAGTGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-7-RP	GCGTAAGAGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-8-FP	CTATTAAGGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-8-RP	AAGGCTATGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-9-FP	GAGCCTTAGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-9-RP	TTATGCGAGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT4-10-FP	TCGCCTTAGTGGAAACAAGACTTGGTGTATC
ZP1-sp-OT4-10-RP	CTAGTACGGAATTCCTCTTCGTTCTAGGTGATA
ZP1-sp-OT5-1-FP	TAGATCGCCATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-1-RP	CTCTCTATGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-2-FP	TATCCTCTCATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-2-RP	AGAGTAGAGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-3-FP	GTAAGGAGCATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-3-RP	ACTGCATAGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-4-FP	AAGGAGTACATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-4-RP	CTAAGCCTGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-5-FP	CGTCTAATCATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-5-RP	TCTCTCCGGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-6-FP	TCGACTAGCATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-6-RP	TTCTAGCTGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-7-FP	CCTAGAGTCATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-7-RP	GCGTAAGAGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-8-FP	CTATTAAGCATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-8-RP	AAGGCTATGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-9-FP	GAGCCTTACATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-9-RP	TTATGCGAGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT5-10-FP	TCGCCTTACATTAGTTCCCATCTCTGGTCCTT
ZP1-sp-OT5-10-RP	CTAGTACGGAAATCTGGTCGTTCAGGTTGA
ZP1-sp-OT6-1-FP	TAGATCGCAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-1-RP	CTCTCTATCTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-2-FP	TATCCTCTAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-2-RP	AGAGTAGACTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-3-FP	GTAAGGAGAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-3-RP	ACTGCATACTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-4-FP	AAGGAGTAAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-4-RP	CTAAGCCTCTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-5-FP	CGTCTAATAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-5-RP	TCTCTCCGCTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-6-FP	TCGACTAGAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-6-RP	TTCTAGCTCTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-7-FP	CCTAGAGTAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-7-RP	GCGTAAGACTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-8-FP	CTATTAAGAATGAGCACAGAGGAAATGTTTAT

ZP1-sp-OT6-8-RP AAGGCTATCTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-9-FP GAGCCTTAAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-9-RP TTATGCGACTTGGTTTTGTTCTTCAAAGTCTC
ZP1-sp-OT6-10-FP TCGCCTTAAATGAGCACAGAGGAAATGTTTAT
ZP1-sp-OT6-10-RP CTAGTACGCTTGGTTTTGTTCTTCAAAGTCTC

ZP1-sp-OT7-1-FP TAGATCGCTGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-1-RP CTCTCTATACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-2-FP TATCCTCTTGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-2-RP AGAGTAGAACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-3-FP GTAAGGAGTGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-3-RP ACTGCATAACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-4-FP AAGGAGTATGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-4-RP CTAAGCCTACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-5-FP CGTCTAATTGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-5-RP TCTCTCCGACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-6-FP TCGACTAGTGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-6-RP TTCTAGCTACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-7-FP CCTAGAGTTGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-7-RP GCGTAAGAACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-8-FP CTATTAAGTGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-8-RP AAGGCTATACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-9-FP GAGCCTTATGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-9-RP TTATGCGAACTGTCTTTCAGTGTGAGCCAAG
ZP1-sp-OT7-10-FP TCGCCTTATGCCAGTATGTAAATGGGTTCTAT
ZP1-sp-OT7-10-RP CTAGTACGACTGTCTTTCAGTGTGAGCCAAG

ZP1-sp-OT8-1-FP TAGATCGCCATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-1-RP CTCTCTATGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-2-FP TATCCTCTCATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-2-RP AGAGTAGAGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-3-FP GTAAGGAGCATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-3-RP ACTGCATAGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-4-FP AAGGAGTACATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-4-RP CTAAGCCTGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-5-FP CGTCTAATCATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-5-RP TCTCTCCGGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-6-FP TCGACTAGCATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-6-RP TTCTAGCTGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-7-FP CCTAGAGTCATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-7-RP GCGTAAGAGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-8-FP CTATTAAGCATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-8-RP AAGGCTATGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-9-FP GAGCCTTACATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-9-RP TTATGCGAGGTCATTTGTGAAGTGTTTTGTCC
ZP1-sp-OT8-10-FP TCGCCTTACATCACCCCAATAGATGTTTATGC
ZP1-sp-OT8-10-RP CTAGTACGGGTCATTTGTGAAGTGTTTTGTCC

ZP1-sp-OT9-1-FP	TAGATCGCTTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-1-RP	CTCTCTATCTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-2-FP	TATCCTCTTTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-2-RP	AGAGTAGACTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-3-FP	GTAAGGAGTTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-3-RP	ACTGCATACTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-4-FP	AAGGAGTATTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-4-RP	CTAAGCCTCTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-5-FP	CGTCTAATTTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-5-RP	TCTCTCCGCTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-6-FP	TCGACTAGTTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-6-RP	TTCTAGCTCTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-7-FP	CCTAGAGTTTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-7-RP	GCGTAAGACTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-8-FP	CTATTAAGTTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-8-RP	AAGGCTATCTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-9-FP	GAGCCTTATTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-9-RP	TTATGCGACTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT9-10-FP	TCGCCTTATTAACTTAGCTGCATTCTGCTTCC
ZP1-sp-OT9-10-RP	CTAGTACGCTTCATCTTTTGGCTCACTTTTCA
ZP1-sp-OT10-1-FP	TAGATCGCCAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-1-RP	CTCTCTATCAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-2-FP	TATCCTCTCAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-2-RP	AGAGTAGACAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-3-FP	GTAAGGAGCAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-3-RP	ACTGCATACAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-4-FP	AAGGAGTACAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-4-RP	CTAAGCCTCAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-5-FP	CGTCTAATCAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-5-RP	TCTCTCCGCAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-6-FP	TCGACTAGCAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-6-RP	TTCTAGCTCAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-7-FP	CCTAGAGTCAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-7-RP	GCGTAAGACAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-8-FP	CTATTAAGCAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-8-RP	AAGGCTATCAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-9-FP	GAGCCTTACAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-9-RP	TTATGCGACAAAAACAAAAACACAGGGGAC
ZP1-sp-OT10-10-FP	TCGCCTTACAGAATTTAAACAGGGGAGGAA
ZP1-sp-OT10-10-RP	CTAGTACGCAAAAACAAAAACACAGGGGAC
ZP1-target-11-FP	TTCTGCCTAACTGTCTGGCCTCCAACC
ZP1-target-11-RP	GCTCAGGATGCTCACCCACCTCTCTCC
ZP1-target-12-FP	AGGAGTCCAACTGTCTGGCCTCCAACC
ZP1-target-12-RP	CATGCCTATGCTCACCCACCTCTCTCC
ZP1-target-13-FP	GTAGAGAGAACTGTCTGGCCTCCAACC
ZP1-target-13-RP	CCTCTCTGTGCTCACCCACCTCTCTCC

ZP1-target-14-FP	AGCGTAGCAACTGTCTGGCCTCCAACC
ZP1-target-14-RP	CAGCCTCGTGCTCACCCACCTCTCTCC
ZP1-target-15-FP	TGCCTCTTAACTGTCTGGCCTCCAACC
ZP1-target-15-RP	TCCTCTACTGCTCACCCACCTCTCTCC
ZP1-target-16-FP	TCATGAGCAACTGTCTGGCCTCCAACC
ZP1-target-16-RP	CCTGAGATTGCTCACCCACCTCTCTCC
ZP1-target-17-FP	TAGCGAGTAACTGTCTGGCCTCCAACC
ZP1-target-17-RP	GTAGCTCCTGCTCACCCACCTCTCTCC
ZP1-target-18-FP	TACTACGCAACTGTCTGGCCTCCAACC
ZP1-target-18-RP	AGGCTCCGTGCTCACCCACCTCTCTCC
ZP1-target-19-FP	GCAGCGTAAACTGTCTGGCCTCCAACC
ZP1-target-19-RP	CTGCGCATTGCTCACCCACCTCTCTCC
ZP1-target-20-FP	GAGCGCTAAACTGTCTGGCCTCCAACC
ZP1-target-20-RP	CGCTCAGTTGCTCACCCACCTCTCTCC
ZP1-sa-OT1-11-FP	TTCTGCCTCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-11-RP	GCTCAGGAGCTGGCATCGGGTATCGT
ZP1-sa-OT1-12-FP	AGGAGTCCCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-12-RP	CATGCCTAGCTGGCATCGGGTATCGT
ZP1-sa-OT1-13-FP	GTAGAGAGCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-13-RP	CCTCTCTGGCTGGCATCGGGTATCGT
ZP1-sa-OT1-14-FP	AGCGTAGCCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-14-RP	CAGCCTCGGCTGGCATCGGGTATCGT
ZP1-sa-OT1-15-FP	TGCCTCTTCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-15-RP	TCCTCTACGCTGGCATCGGGTATCGT
ZP1-sa-OT1-16-FP	TCATGAGCCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-16-RP	CCTGAGATGCTGGCATCGGGTATCGT
ZP1-sa-OT1-17-FP	TAGCGAGTCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-17-RP	GTAGCTCCGCTGGCATCGGGTATCGT
ZP1-sa-OT1-18-FP	TACTACGCCCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-18-RP	AGGCTCCGGCTGGCATCGGGTATCGT
ZP1-sa-OT1-19-FP	GCAGCGTACCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-19-RP	CTGCGCATGCTGGCATCGGGTATCGT
ZP1-sa-OT1-20-FP	GAGCGCTACCTTTGAAGGGTGTCAGGAAA
ZP1-sa-OT1-20-RP	CGCTCAGTGCTGGCATCGGGTATCGT
ZP1-sa-OT2-11-FP	TTCTGCCTTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-11-RP	GCTCAGGAAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-12-FP	AGGAGTCCTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-12-RP	CATGCCTAAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-13-FP	GTAGAGAGTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-13-RP	CCTCTCTGAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-14-FP	AGCGTAGCTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-14-RP	CAGCCTCGAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-15-FP	TGCCTCTTTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-15-RP	TCCTCTACAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-16-FP	TCATGAGCTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-16-RP	CCTGAGATAATGGAGGGGTAGTGGTTTG

ZP1-sa-OT2-17-FP	TAGCGAGTTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-17-RP	GTAGCTCCAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-18-FP	TACTACGCTTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-18-RP	AGGCTCCGAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-19-FP	GCAGCGTATTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-19-RP	CTGCGCATAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT2-20-FP	GAGCGCTATTTGTTTATTGCCTTTCAGC
ZP1-sa-OT2-20-RP	CGCTCAGTAATGGAGGGGTAGTGGTTTG
ZP1-sa-OT3-11-FP	TTCTGCCTCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-11-RP	GCTCAGGAAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-12-FP	AGGAGTCCCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-12-RP	CATGCCTAAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-13-FP	GTAGAGAGCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-13-RP	CCTCTCTGAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-14-FP	AGCGTAGCCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-14-RP	CAGCCTCGAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-15-FP	TGCCTCTTCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-15-RP	TCCTCTACAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-16-FP	TCATGAGCCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-16-RP	CCTGAGATAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-17-FP	TAGCGAGTCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-17-RP	GTAGCTCCAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-18-FP	TACTACGCCCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-18-RP	AGGCTCCGAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-19-FP	GCAGCGTACCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-19-RP	CTGCGCATAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT3-20-FP	GAGCGCTACCTTGTGAATGAGGTTGAATGT
ZP1-sa-OT3-20-RP	CGCTCAGTAAGTGTCTTGTTTCCTCCTTTG
ZP1-sa-OT4-11-FP	TTCTGCCTCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-11-RP	GCTCAGGATTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-12-FP	AGGAGTCCCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-12-RP	CATGCCTATTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-13-FP	GTAGAGAGCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-13-RP	CCTCTCTGTTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-14-FP	AGCGTAGCCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-14-RP	CAGCCTCGTTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-15-FP	TGCCTCTTCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-15-RP	TCCTCTACTTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-16-FP	TCATGAGCCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-16-RP	CCTGAGATTTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-17-FP	TAGCGAGTCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-17-RP	GTAGCTCCTTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-18-FP	TACTACGCCATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-18-RP	AGGCTCCGTTTCCCTTTCTGAAGATTTACC
ZP1-sa-OT4-19-FP	GCAGCGTACATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-19-RP	CTGCGCATTTTCCCTTTCTGAAGATTTACC

ZP1-sa-OT4-20-FP GAGCGCTACATCTCCACATAAGGAGACAAA
ZP1-sa-OT4-20-RP CGCTCAGTTTTCCCTTTCTGAAGATTTACC

ZP1-sa-OT5-11-FP TTCTGCCTCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-11-RP GCTCAGGAACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-12-FP AGGAGTCCCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-12-RP CATGCCTAACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-13-FP GTAGAGAGCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-13-RP CCTCTCTGACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-14-FP AGCGTAGCCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-14-RP CAGCCTCGACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-15-FP TGCCTCTTCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-15-RP TCCTCTACACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-16-FP TCATGAGCCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-16-RP CCTGAGATACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-17-FP TAGCGAGTCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-17-RP GTAGCTCCACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-18-FP TACTACGCCAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-18-RP AGGCTCCGACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-19-FP GCAGCGTACAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-19-RP CTGCGCATACCAGCAAACACGAGTCAGATAA
ZP1-sa-OT5-20-FP GAGCGCTACAGGCAGATAGCAAGTTCAAGG
ZP1-sa-OT5-20-RP CGCTCAGTACCAGCAAACACGAGTCAGATAA

ZP1-sa-OT6-11-FP TTCTGCCTCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-11-RP GCTCAGGAAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-12-FP AGGAGTCCCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-12-RP CATGCCTAAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-13-FP GTAGAGAGCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-13-RP CCTCTCTGAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-14-FP AGCGTAGCCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-14-RP CAGCCTCGAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-15-FP TGCCTCTTCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-15-RP TCCTCTACAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-16-FP TCATGAGCCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-16-RP CCTGAGATAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-17-FP TAGCGAGTCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-17-RP GTAGCTCCAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-18-FP TACTACGCCCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-18-RP AGGCTCCGAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-19-FP GCAGCGTACCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-19-RP CTGCGCATAACAGGTTATGAAAAGCGGACA
ZP1-sa-OT6-20-FP GAGCGCTACCAGGTTTCTAGTGCCAAGTCA
ZP1-sa-OT6-20-RP CGCTCAGTAACAGGTTATGAAAAGCGGACA

ZP1-sa-OT7-11-FP TTCTGCCTTAGACACCACGCAACCACC
ZP1-sa-OT7-11-RP GCTCAGGATCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-12-FP AGGAGTCCTAGACACCACGCAACCACC

ZP1-sa-OT7-12-RP CATGCCTATCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-13-FP GTAGAGAGTAGACACCACGCAACCACC
ZP1-sa-OT7-13-RP CCTCTCTGTCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-14-FP AGCGTAGCTAGACACCACGCAACCACC
ZP1-sa-OT7-14-RP CAGCCTCGTCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-15-FP TGCCTCTTTAGACACCACGCAACCACC
ZP1-sa-OT7-15-RP TCCTCTACTCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-16-FP TCATGAGCTAGACACCACGCAACCACC
ZP1-sa-OT7-16-RP CCTGAGATTCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-17-FP TAGCGAGTTAGACACCACGCAACCACC
ZP1-sa-OT7-17-RP GTAGCTCCTCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-18-FP TACTACGCTAGACACCACGCAACCACC
ZP1-sa-OT7-18-RP AGGCTCCGTCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-19-FP GCAGCGTATAGACACCACGCAACCACC
ZP1-sa-OT7-19-RP CTGCGCATTCCAAAGGGTTTGTCATCAG
ZP1-sa-OT7-20-FP GAGCGCTATAGACACCACGCAACCACC
ZP1-sa-OT7-20-RP CGCTCAGTTCCAAAGGGTTTGTCATCAG

ZP1-sa-OT8-11-FP TTCTGCCTTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-11-RP GCTCAGGATTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-12-FP AGGAGTCCTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-12-RP CATGCCTATTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-13-FP GTAGAGAGTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-13-RP CCTCTCTGTTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-14-FP AGCGTAGCTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-14-RP CAGCCTCGTTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-15-FP TGCCTCTTTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-15-RP TCCTCTACTTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-16-FP TCATGAGCTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-16-RP CCTGAGATTTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-17-FP TAGCGAGTTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-17-RP GTAGCTCCTTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-18-FP TACTACGCTTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-18-RP AGGCTCCGTTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-19-FP GCAGCGTATTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-19-RP CTGCGCATTTGTCATAGTCAATAGTAAGCAGTCT
ZP1-sa-OT8-20-FP GAGCGCTATTCAATAACCATCAAAGTCCCT
ZP1-sa-OT8-20-RP CGCTCAGTTTGTCATAGTCAATAGTAAGCAGTCT

ZP1-sa-OT9-11-FP TTCTGCCTTCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-11-RP GCTCAGGAAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-12-FP AGGAGTCCTCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-12-RP CATGCCTAAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-13-FP GTAGAGAGTCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-13-RP CCTCTCTGAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-14-FP AGCGTAGCTCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-14-RP CAGCCTCGAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-15-FP TGCCTCTTTCTCAACCAAGTCAGGGAAATG

ZP1-sa-OT9-15-RP	TCCTCTACAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-16-FP	TCATGAGCTCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-16-RP	CCTGAGATAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-17-FP	TAGCGAGTTCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-17-RP	GTAGCTCCAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-18-FP	TACTACGCTCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-18-RP	AGGCTCCGAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-19-FP	GCAGCGTATCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-19-RP	CTGCGCATAAATCAGCACCTGCCTCCAC
ZP1-sa-OT9-20-FP	GAGCGCTATCTCAACCAAGTCAGGGAAATG
ZP1-sa-OT9-20-RP	CGCTCAGTAAATCAGCACCTGCCTCCAC
ZP1-sa-OT10-11-FP	TTCTGCCTTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-11-RP	GCTCAGGAGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-12-FP	AGGAGTCCTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-12-RP	CATGCCTAGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-13-FP	GTAGAGAGTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-13-RP	CCTCTCTGGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-14-FP	AGCGTAGCTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-14-RP	CAGCCTCGGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-15-FP	TGCCTCTTTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-15-RP	TCCTCTACGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-16-FP	TCATGAGCTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-16-RP	CCTGAGATGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-17-FP	TAGCGAGTTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-17-RP	GTAGCTCCGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-18-FP	TACTACGCTCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-18-RP	AGGCTCCGGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-19-FP	GCAGCGTATCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-19-RP	CTGCGCATGAACCATTCCCATGAAGCTTTAC
ZP1-sa-OT10-20-FP	GAGCGCTATCCTCTTGGCTGCTGAGACC
ZP1-sa-OT10-20-RP	CGCTCAGTGAACCATTCCCATGAAGCTTTAC
SLX2-target-1-FP	TAGATCGCGACTTTTGGCAACTTAAGGTTT
SLX2-target-1-RP	CTCTCTATACCCCAACAGAGGAAGAACA
SLX2-target-2-FP	TATCCTCTGACTTTTGGCAACTTAAGGTTT
SLX2-target-2-RP	AGAGTAGAACCCCAACAGAGGAAGAACA
SLX2-target-3-FP	GTAAGGAGGACTTTTGGCAACTTAAGGTTT
SLX2-target-3-RP	ACTGCATAACCCCAACAGAGGAAGAACA
SLX2-target-4-FP	AAGGAGTAGACTTTTGGCAACTTAAGGTTT
SLX2-target-4-RP	CTAAGCCTACCCCAACAGAGGAAGAACA
SLX2-target-5-FP	CGTCTAATGACTTTTGGCAACTTAAGGTTT
SLX2-target-5-RP	TCTCTCCGACCCCAACAGAGGAAGAACA
SLX2-target-6-FP	TCGACTAGGACTTTTGGCAACTTAAGGTTT
SLX2-target-6-RP	TTCTAGCTACCCCAACAGAGGAAGAACA
SLX2-target-7-FP	CCTAGAGTGACTTTTGGCAACTTAAGGTTT
SLX2-target-7-RP	GCGTAAGAACCCCAACAGAGGAAGAACA
SLX2-target-8-FP	CTATTAAGGACTTTTGGCAACTTAAGGTTT

SLX2-target-8-RP	AAGGCTATACCCCAACAGAGGAAGAACA
SLX2-target-9-FP	GAGCCTTAGACTTTTGGCAACTTAAGGTTT
SLX2-target-9-RP	TTATGCGAACCCCAACAGAGGAAGAACA
SLX2-target-10-FP	TCGCCTTAGACTTTTGGCAACTTAAGGTTT
SLX2-target-10-RP	CTAGTACGACCCCAACAGAGGAAGAACA
SLX2-sp-OT1-1-FP	TAGATCGCGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-1-RP	CTCTCTATGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-2-FP	TATCCTCTGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-2-RP	AGAGTAGAGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-3-FP	GTAAGGAGGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-3-RP	ACTGCATAGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-4-FP	AAGGAGTAGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-4-RP	CTAAGCCTGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-5-FP	CGTCTAATGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-5-RP	TCTCTCCGGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-6-FP	TCGACTAGGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-6-RP	TTCTAGCTGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-7-FP	CCTAGAGTGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-7-RP	GCGTAAGAGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-8-FP	CTATTAAGGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-8-RP	AAGGCTATGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-9-FP	GAGCCTTAGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-9-RP	TTATGCGAGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT1-10-FP	TCGCCTTAGGTTACAGCAAAGATGGCTG
SLX2-sp-OT1-10-RP	CTAGTACGGTGACAAAGGGTGACTTAAGAGT
SLX2-sp-OT2-1-FP	TAGATCGCCACCATCTTCAACCAAACCT
SLX2-sp-OT2-1-RP	CTCTCTATATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-2-FP	TATCCTCTCACCATCTTCAACCAAACCT
SLX2-sp-OT2-2-RP	AGAGTAGAATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-3-FP	GTAAGGAGCACCATCTTCAACCAAACCT
SLX2-sp-OT2-3-RP	ACTGCATAATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-4-FP	AAGGAGTACACCATCTTCAACCAAACCT
SLX2-sp-OT2-4-RP	CTAAGCCTATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-5-FP	CGTCTAATCACCATCTTCAACCAAACCT
SLX2-sp-OT2-5-RP	TCTCTCCGATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-6-FP	TCGACTAGCACCATCTTCAACCAAACCT
SLX2-sp-OT2-6-RP	TTCTAGCTATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-7-FP	CCTAGAGTCACCATCTTCAACCAAACCT
SLX2-sp-OT2-7-RP	GCGTAAGAATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-8-FP	CTATTAAGCACCATCTTCAACCAAACCT
SLX2-sp-OT2-8-RP	AAGGCTATATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-9-FP	GAGCCTTACACCATCTTCAACCAAACCT
SLX2-sp-OT2-9-RP	TTATGCGAATTCAAGGAACAGGAAACAGA
SLX2-sp-OT2-10-FP	TCGCCTTACACCATCTTCAACCAAACCT
SLX2-sp-OT2-10-RP	CTAGTACGATTCAAGGAACAGGAAACAGA
SLX2-sp-OT3-1-FP	TAGATCGCAGATACCAACTACTCGGTTTCAG

SLX2-sp-OT3-1-RP CTCTCTATAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-2-FP TATCCTCTAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-2-RP AGAGTAGAAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-3-FP GTAAGGAGAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-3-RP ACTGCATAAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-4-FP AAGGAGTAAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-4-RP CTAAGCCTAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-5-FP CGTCTAATAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-5-RP TCTCTCCGAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-6-FP TCGACTAGAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-6-RP TTCTAGCTAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-7-FP CCTAGAGTAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-7-RP GCGTAAGAAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-8-FP CTATTAAGAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-8-RP AAGGCTATAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-9-FP GAGCCTTAAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-9-RP TTATGCGAAGATTACTACTGCTGCATGTGAG
SLX2-sp-OT3-10-FP TCGCCTTAAGATACCAACTACTCGGTTTCAG
SLX2-sp-OT3-10-RP CTAGTACGAGATTACTACTGCTGCATGTGAG

SLX2-sp-OT4-1-FP TAGATCGCGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-1-RP CTCTCTATTAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-2-FP TATCCTCTGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-2-RP AGAGTAGATAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-3-FP GTAAGGAGGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-3-RP ACTGCATATAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-4-FP AAGGAGTAGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-4-RP CTAAGCCTTAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-5-FP CGTCTAATGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-5-RP TCTCTCCGTAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-6-FP TCGACTAGGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-6-RP TTCTAGCTTAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-7-FP CCTAGAGTGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-7-RP GCGTAAGATAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-8-FP CTATTAAGGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-8-RP AAGGCTATTAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-9-FP GAGCCTTAGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-9-RP TTATGCGATAATGGAGCCAAAGTAGGGG
SLX2-sp-OT4-10-FP TCGCCTTAGAAACTGTAAGCCAAACCCA
SLX2-sp-OT4-10-RP CTAGTACGTAATGGAGCCAAAGTAGGGG

SLX2-sp-OT5-1-FP TAGATCGCCATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-1-RP CTCTCTATAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-2-FP TATCCTCTCATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-2-RP AGAGTAGAAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-3-FP GTAAGGAGCATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-3-RP ACTGCATAAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-4-FP AAGGAGTACATCTTTCTGTAGGAATGTTGCT

SLX2-sp-OT5-4-RP CTAAGCCTAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-5-FP CGTCTAATCATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-5-RP TCTCTCCGAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-6-FP TCGACTAGCATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-6-RP TTCTAGCTAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-7-FP CCTAGAGTCATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-7-RP GCGTAAGAAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-8-FP CTATTAAGCATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-8-RP AAGGCTATAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-9-FP GAGCCTTACATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-9-RP TTATGCGAAAAACCTATGAGGTTCAGTAGCA
SLX2-sp-OT5-10-FP TCGCCTTACATCTTTCTGTAGGAATGTTGCT
SLX2-sp-OT5-10-RP CTAGTACGAAAACCTATGAGGTTCAGTAGCA

SLX2-sp-OT6-1-FP TAGATCGCTGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-1-RP CTCTCTATCAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-2-FP TATCCTCTTGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-2-RP AGAGTAGACAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-3-FP GTAAGGAGTGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-3-RP ACTGCATACAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-4-FP AAGGAGTATGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-4-RP CTAAGCCTCAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-5-FP CGTCTAATTGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-5-RP TCTCTCCGCAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-6-FP TCGACTAGTGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-6-RP TTCTAGCTCAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-7-FP CCTAGAGTTGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-7-RP GCGTAAGACAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-8-FP CTATTAAGTGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-8-RP AAGGCTATCAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-9-FP GAGCCTTATGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-9-RP TTATGCGACAGGTGACAGATCGGAAGATA
SLX2-sp-OT6-10-FP TCGCCTTATGATTCAGTAAAGGTGGAGGA
SLX2-sp-OT6-10-RP CTAGTACGCAGGTGACAGATCGGAAGATA

SLX2-sp-OT7-1-FP TAGATCGCGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-1-RP CTCTCTATCAGACCATAGCTGTCCCGT
SLX2-sp-OT7-2-FP TATCCTCTGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-2-RP AGAGTAGACAGACCATAGCTGTCCCGT
SLX2-sp-OT7-3-FP GTAAGGAGGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-3-RP ACTGCATACAGACCATAGCTGTCCCGT
SLX2-sp-OT7-4-FP AAGGAGTAGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-4-RP CTAAGCCTCAGACCATAGCTGTCCCGT
SLX2-sp-OT7-5-FP CGTCTAATGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-5-RP TCTCTCCGCAGACCATAGCTGTCCCGT
SLX2-sp-OT7-6-FP TCGACTAGGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-6-RP TTCTAGCTCAGACCATAGCTGTCCCGT
SLX2-sp-OT7-7-FP CCTAGAGTGTTCGCCGTCCAGTAACC

SLX2-sp-OT7-7-RP GCGTAAGACAGACCATAGCTGTCCCGT
SLX2-sp-OT7-8-FP CTATTAAGGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-8-RP AAGGCTATCAGACCATAGCTGTCCCGT
SLX2-sp-OT7-9-FP GAGCCTTAGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-9-RP TTATGCGACAGACCATAGCTGTCCCGT
SLX2-sp-OT7-10-FP TCGCCTTAGTTCGCCGTCCAGTAACC
SLX2-sp-OT7-10-RP CTAGTACGCAGACCATAGCTGTCCCGT
SLX2-sp-OT8-1-FP TAGATCGCTCTCAGCCGTCATCGATAAT

SLX2-sp-OT8-1-RP CTCTCTATAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-2-FP TATCCTCTTCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-2-RP AGAGTAGAAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-3-FP GTAAGGAGTCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-3-RP ACTGCATAAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-4-FP AAGGAGTATCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-4-RP CTAAGCCTAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-5-FP CGTCTAATTCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-5-RP TCTCTCCGAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-6-FP TCGACTAGTCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-6-RP TTCTAGCTAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-7-FP CCTAGAGTTCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-7-RP GCGTAAGAAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-8-FP CTATTAAGTCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-8-RP AAGGCTATAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-9-FP GAGCCTTATCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-9-RP TTATGCGAAAGGATGGGGGTGGTGTT
SLX2-sp-OT8-10-FP TCGCCTTATCTCAGCCGTCATCGATAAT
SLX2-sp-OT8-10-RP CTAGTACGAAGGATGGGGGTGGTGTT

SLX2-sp-OT9-1-FP TAGATCGCAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-1-RP CTCTCTATGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-2-FP TATCCTCTAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-2-RP AGAGTAGAGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-3-FP GTAAGGAGAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-3-RP ACTGCATAGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-4-FP AAGGAGTAAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-4-RP CTAAGCCTGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-5-FP CGTCTAATAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-5-RP TCTCTCCGGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-6-FP TCGACTAGAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-6-RP TTCTAGCTGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-7-FP CCTAGAGTAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-7-RP GCGTAAGAGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-8-FP CTATTAAGAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-8-RP AAGGCTATGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-9-FP GAGCCTTAAGAGCTGAAGTCACAGGCAG
SLX2-sp-OT9-9-RP TTATGCGAGAGGAAGATGGGGGAAATG
SLX2-sp-OT9-10-FP TCGCCTTAAGAGCTGAAGTCACAGGCAG

SLX2-sp-OT9-10-RP	CTAGTACGGAGGAAGATGGGGGAAATG
SLX2-sp-OT10-1-FP	TAGATCGCACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-1-RP	CTCTCTATATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-2-FP	TATCCTCTACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-2-RP	AGAGTAGAATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-3-FP	GTAAGGAGACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-3-RP	ACTGCATAATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-4-FP	AAGGAGTAACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-4-RP	CTAAGCCTATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-5-FP	CGTCTAATACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-5-RP	TCTCTCCGATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-6-FP	TCGACTAGACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-6-RP	TTCTAGCTATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-7-FP	CCTAGAGTACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-7-RP	GCGTAAGAATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-8-FP	CTATTAAGACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-8-RP	AAGGCTATATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-9-FP	GAGCCTTAACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-9-RP	TTATGCGAATGACACAGTGACGTGACATAAG
SLX2-sp-OT10-10-FP	TCGCCTTAACAGGAGATGGCAAGGCTA
SLX2-sp-OT10-10-RP	CTAGTACGATGACACAGTGACGTGACATAAG
SLX2-target-11-FP	TTCTGCCTGACTTTTGGCAACTTAAGGTTT
SLX2-target-11-RP	GCTCAGGAACCCCAACAGAGGAAGAACA
SLX2-target-12-FP	AGGAGTCCGACTTTTGGCAACTTAAGGTTT
SLX2-target-12-RP	CATGCCTAACCCCAACAGAGGAAGAACA
SLX2-target-13-FP	GTAGAGAGGACTTTTGGCAACTTAAGGTTT
SLX2-target-13-RP	CCTCTCTGACCCCAACAGAGGAAGAACA
SLX2-target-14-FP	AGCGTAGCGACTTTTGGCAACTTAAGGTTT
SLX2-target-14-RP	CAGCCTCGACCCCAACAGAGGAAGAACA
SLX2-target-15-FP	TGCCTCTTGACTTTTGGCAACTTAAGGTTT
SLX2-target-15-RP	TCCTCTACACCCCAACAGAGGAAGAACA
SLX2-target-16-FP	TCATGAGCGACTTTTGGCAACTTAAGGTTT
SLX2-target-16-RP	CCTGAGATACCCCAACAGAGGAAGAACA
SLX2-target-17-FP	TAGCGAGTGACTTTTGGCAACTTAAGGTTT
SLX2-target-17-RP	GTAGCTCCACCCCAACAGAGGAAGAACA
SLX2-target-18-FP	TACTACGCGACTTTTGGCAACTTAAGGTTT
SLX2-target-18-RP	AGGCTCCGACCCCAACAGAGGAAGAACA
SLX2-target-19-FP	GCAGCGTAGACTTTTGGCAACTTAAGGTTT
SLX2-target-19-RP	CTGCGCATACCCCAACAGAGGAAGAACA
SLX2-target-20-FP	GAGCGCTAGACTTTTGGCAACTTAAGGTTT
SLX2-target-20-RP	CGCTCAGTACCCCAACAGAGGAAGAACA
SLX2-sa-OT1-11-FP	TTCTGCCTGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-11-RP	GCTCAGGACTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-12-FP	AGGAGTCCGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-12-RP	CATGCCTACTAGACAGGAAATGGGAAAAA

SLX2-sa-OT1-13-FP GTAGAGAGGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-13-RP CCTCTCTGCTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-14-FP AGCGTAGCGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-14-RP CAGCCTCGCTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-15-FP TGCCTCTTGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-15-RP TCCTCTACCTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-16-FP TCATGAGCGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-16-RP CCTGAGATCTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-17-FP TAGCGAGTGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-17-RP GTAGCTCCCTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-18-FP TACTACGCGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-18-RP AGGCTCCGCTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-19-FP GCAGCGTAGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-19-RP CTGCGCATCTAGACAGGAAATGGGAAAAA
SLX2-sa-OT1-20-FP GAGCGCTAGTGAAAGTAAATTAAATTTCCAAG
SLX2-sa-OT1-20-RP CGCTCAGTCTAGACAGGAAATGGGAAAAA

SLX2-sa-OT2-11-FP TTCTGCCTAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-11-RP GCTCAGGATGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-12-FP AGGAGTCCAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-12-RP CATGCCTATGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-13-FP GTAGAGAGAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-13-RP CCTCTCTGTGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-14-FP AGCGTAGCAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-14-RP CAGCCTCGTGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-15-FP TGCCTCTTAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-15-RP TCCTCTACTGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-16-FP TCATGAGCAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-16-RP CCTGAGATTGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-17-FP TAGCGAGTAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-17-RP GTAGCTCCTGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-18-FP TACTACGCAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-18-RP AGGCTCCGTGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-19-FP GCAGCGTAAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-19-RP CTGCGCATTGTTCTTCACGTTTCTTGTCC
SLX2-sa-OT2-20-FP GAGCGCTAAAAGGAGCCAGAGTTCCAG
SLX2-sa-OT2-20-RP CGCTCAGTTGTTCTTCACGTTTCTTGTCC

SLX2-sa-OT3-11-FP TTCTGCCTCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-11-RP GCTCAGGAGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-12-FP AGGAGTCCCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-12-RP CATGCCTAGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-13-FP GTAGAGAGCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-13-RP CCTCTCTGGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-14-FP AGCGTAGCCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-14-RP CAGCCTCGGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-15-FP TGCCTCTTCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-15-RP TCCTCTACGTCCCAGGGTGAGGAAGA

SLX2-sa-OT3-16-FP	TCATGAGCCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-16-RP	CCTGAGATGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-17-FP	TAGCGAGTCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-17-RP	GTAGCTCCGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-18-FP	TACTACGCCTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-18-RP	AGGCTCCGGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-19-FP	GCAGCGTACTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-19-RP	CTGCGCATGTCCCAGGGTGAGGAAGA
SLX2-sa-OT3-20-FP	GAGCGCTACTTTCCCGTGTTGGTTGG
SLX2-sa-OT3-20-RP	CGCTCAGTGTCCCAGGGTGAGGAAGA
SLX2-sa-OT4-11-FP	TTCTGCCTACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-11-RP	GCTCAGGAACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-12-FP	AGGAGTCCACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-12-RP	CATGCCTAACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-13-FP	GTAGAGAGACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-13-RP	CCTCTCTGACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-14-FP	AGCGTAGCACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-14-RP	CAGCCTCGACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-15-FP	TGCCTCTTACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-15-RP	TCCTCTACACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-16-FP	TCATGAGCACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-16-RP	CCTGAGATACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-17-FP	TAGCGAGTACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-17-RP	GTAGCTCCACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-18-FP	TACTACGCACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-18-RP	AGGCTCCGACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-19-FP	GCAGCGTAACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-19-RP	CTGCGCATACATCAAGTGAATCATAAAACATG
SLX2-sa-OT4-20-FP	GAGCGCTAACATTTCTAGAGCACCGGAGT
SLX2-sa-OT4-20-RP	CGCTCAGTACATCAAGTGAATCATAAAACATG
SLX2-sa-OT5-11-FP	TTCTGCCTAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-11-RP	GCTCAGGAAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-12-FP	AGGAGTCCAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-12-RP	CATGCCTAAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-13-FP	GTAGAGAGAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-13-RP	CCTCTCTGAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-14-FP	AGCGTAGCAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-14-RP	CAGCCTCGAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-15-FP	TGCCTCTTAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-15-RP	TCCTCTACAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-16-FP	TCATGAGCAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-16-RP	CCTGAGATAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-17-FP	TAGCGAGTAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-17-RP	GTAGCTCCAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-18-FP	TACTACGCAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-18-RP	AGGCTCCGAAAGGATTTTATTTTCTGTATTTCC

SLX2-sa-OT5-19-FP GCAGCGTAAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-19-RP CTGCGCATAAAGGATTTTATTTTCTGTATTTCC
SLX2-sa-OT5-20-FP GAGCGCTAAACTAACTTTCTAGACAAGGCTGG
SLX2-sa-OT5-20-RP CGCTCAGTAAAGGATTTTATTTTCTGTATTTCC

SLX2-sa-OT6-11-FP TTCTGCCTAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-11-RP GCTCAGGAAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-12-FP AGGAGTCCAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-12-RP CATGCCTAAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-13-FP GTAGAGAGAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-13-RP CCTCTCTGAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-14-FP AGCGTAGCAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-14-RP CAGCCTCGAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-15-FP TGCCTCTTAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-15-RP TCCTCTACAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-16-FP TCATGAGCAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-16-RP CCTGAGATAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-17-FP TAGCGAGTAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-17-RP GTAGCTCCAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-18-FP TACTACGCAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-18-RP AGGCTCCGAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-19-FP GCAGCGTAAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-19-RP CTGCGCATAAAAGGATGGAGTTGTATGAGA
SLX2-sa-OT6-20-FP GAGCGCTAAACGAAAAAAGAGTCACAGGA
SLX2-sa-OT6-20-RP CGCTCAGTAAAAGGATGGAGTTGTATGAGA

SLX2-sa-OT7-11-FP TTCTGCCTCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-11-RP GCTCAGGATGATTGCTGGACTTCGATATT
SLX2-sa-OT7-12-FP AGGAGTCCCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-12-RP CATGCCTATGATTGCTGGACTTCGATATT
SLX2-sa-OT7-13-FP GTAGAGAGCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-13-RP CCTCTCTGTGATTGCTGGACTTCGATATT
SLX2-sa-OT7-14-FP AGCGTAGCCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-14-RP CAGCCTCGTGATTGCTGGACTTCGATATT
SLX2-sa-OT7-15-FP TGCCTCTTCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-15-RP TCCTCTACTGATTGCTGGACTTCGATATT
SLX2-sa-OT7-16-FP TCATGAGCCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-16-RP CCTGAGATTGATTGCTGGACTTCGATATT
SLX2-sa-OT7-17-FP TAGCGAGTCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-17-RP GTAGCTCCTGATTGCTGGACTTCGATATT
SLX2-sa-OT7-18-FP TACTACGCCTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-18-RP AGGCTCCGTGATTGCTGGACTTCGATATT
SLX2-sa-OT7-19-FP GCAGCGTACTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-19-RP CTGCGCATTGATTGCTGGACTTCGATATT
SLX2-sa-OT7-20-FP GAGCGCTACTAACCTTTTCCCCACTGTGT
SLX2-sa-OT7-20-RP CGCTCAGTTGATTGCTGGACTTCGATATT

SLX2-sa-OT8-11-FP TTCTGCCTTTTTGTGTGTGTTGTGTACAGTG

SLX2-sa-OT8-11-RP GCTCAGGAAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-12-FP AGGAGTCCTTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-12-RP CATGCCTAAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-13-FP GTAGAGAGTTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-13-RP CCTCTCTGAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-14-FP AGCGTAGCTTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-14-RP CAGCCTCGAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-15-FP TGCCTCTTTTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-15-RP TCCTCTACAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-16-FP TCATGAGCTTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-16-RP CCTGAGATAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-17-FP TAGCGAGTTTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-17-RP GTAGCTCCAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-18-FP TACTACGCTTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-18-RP AGGCTCCGAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-19-FP GCAGCGTATTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-19-RP CTGCGCATAATGTGTTGATTTTGTGAGGG
SLX2-sa-OT8-20-FP GAGCGCTATTTTGTGTGTGTTGTGTACAGTG
SLX2-sa-OT8-20-RP CGCTCAGTAATGTGTTGATTTTGTGAGGG

SLX2-sa-OT9-11-FP TTCTGCCTTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-11-RP GCTCAGGAGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-12-FP AGGAGTCCTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-12-RP CATGCCTAGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-13-FP GTAGAGAGTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-13-RP CCTCTCTGGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-14-FP AGCGTAGCTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-14-RP CAGCCTCGGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-15-FP TGCCTCTTTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-15-RP TCCTCTACGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-16-FP TCATGAGCTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-16-RP CCTGAGATGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-17-FP TAGCGAGTTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-17-RP GTAGCTCCGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-18-FP TACTACGCTGTCTGACACGTTGGGTTC
SLX2-sa-OT9-18-RP AGGCTCCGGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-19-FP GCAGCGTATGTCTGACACGTTGGGTTC
SLX2-sa-OT9-19-RP CTGCGCATGCTGCTGGAGCCTTTCTAT
SLX2-sa-OT9-20-FP GAGCGCTATGTCTGACACGTTGGGTTC
SLX2-sa-OT9-20-RP CGCTCAGTGCTGCTGGAGCCTTTCTAT

SLX2-sa-OT10-11-FP TTCTGCCTACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-11-RP GCTCAGGACAATCACAAACCTCACATATGG
SLX2-sa-OT10-12-FP AGGAGTCCACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-12-RP CATGCCTACAATCACAAACCTCACATATGG
SLX2-sa-OT10-13-FP GTAGAGAGACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-13-RP CCTCTCTGCAATCACAAACCTCACATATGG
SLX2-sa-OT10-14-FP AGCGTAGCACTGCTCCGGTCAGGAAC

SLX2-sa-OT10-14-RP CAGCCTCGCAATCACAAACCTCACATATGG
SLX2-sa-OT10-15-FP TGCCTCTTACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-15-RP TCCTCTACCAATCACAAACCTCACATATGG
SLX2-sa-OT10-16-FP TCATGAGCACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-16-RP CCTGAGATCAATCACAAACCTCACATATGG
SLX2-sa-OT10-17-FP TAGCGAGTACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-17-RP GTAGCTCCCAATCACAAACCTCACATATGG
SLX2-sa-OT10-18-FP TACTACGCACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-18-RP AGGCTCCGCAATCACAAACCTCACATATGG
SLX2-sa-OT10-19-FP GCAGCGTAACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-19-RP CTGCGCATCAATCACAAACCTCACATATGG
SLX2-sa-OT10-20-FP GAGCGCTAACTGCTCCGGTCAGGAAC
SLX2-sa-OT10-20-RP CGCTCAGTCAATCACAAACCTCACATATGG