

**S1 Table. List of primers used in this study.**

Primer name	Sequence	Used for
Or7a ge F2	GATGGGGTTCTTCGGGTTCTTAAG	genomic PCR & sequencing
Or7a ge R2	ACCACCGAGAAGCAGGCGTAGATG	genomic PCR & sequencing
Or7a ge F3	GAGTTAGAGGATTACCAACTGAGG	genomic PCR & sequencing
Or7a ge R3	GGTTAGCAGGCTTCTGTCTTGCC	genomic PCR & sequencing
Or7a CRISPR5' chi FW	<u>CTTCGTGCTCACCGCCATGGCTGA</u>	sgRNA
Or7a CRISPR5' chi RV	<u>AAACTCAGCCATGGCGGTGAGCAC</u>	sgRNA
Or7a CRISPR3' chi FW	<u>CTTCGCGCTCTACACGCTCATCAAG</u>	sgRNA
Or7a CRISPR3' chi RV	<u>AAACCTTGATGAGCGTGTAGAGCGC</u>	sgRNA
Or7a 5' arm AarI FW	GGTACACCTGCGCAGTGCACATAAAGAAGCATATTGCTGCTG	donor
Or7a 5' arm AarI RV	GGACCACCTGCCCTCCTACTGATGGACTTTTGACGCCTGGGAA	donor
Or7a 3' arm SapI FW	GAGTGCTCTTCTTATAAGGGGATGAATCTCGGCGAGCG	donor
Or7a 3' arm SapI RV	GGCTGCTCTTCGGACACAACTGGATCTGCTGGATGTGG	donor
Or7a ge F4	TAACGAATCGAATCGAAATGAGGG	sequencing
Or7a ge R4	AAAAGTAGCGCATCCTATAGATAC	sequencing
Or59b ge 5' F1	AGTTGACAGGGCTGCTTGACCTC	genomic PCR & sequencing
Or59b ge 5' R1	ACGCAGGTCCAGAAGAGATACACG	genomic PCR & sequencing
Or59b ge 3' F2	CCATTTTAGGTGGCCAAGTTCGCC	genomic PCR & sequencing
Or59b ge 3' R2	GTTGTTACAATCGTCGTCGACTCG	genomic PCR & sequencing
Or59b CRISPR5' chi FW	<u>CTTCGATGCCACTGACCGGTGGT</u>	sgRNA
Or59b CRISPR5' chi RV	<u>AAACACCACCGGTGCTGGGCATC</u>	sgRNA
Or59b CRISPR3' chi FW	<u>CTTCGCTCATAAAGAATTGCTGGG</u>	sgRNA
Or59b CRISPR3' chi RV	<u>AAACCCAGCAATTCTTTATGAGC</u>	sgRNA
Or59b 5' arm AarI FW	GGTACACCTGCGCAGTGCCTCAAGGACGAACCGTTTCAGGTGC	donor
Or59b 5' arm AarI RV	GGACCACCTGCCCTCCTACGGTCCGTGCCAGCAACTGCACCTT	donor
Or59b 3' arm SapI FW	GAGTGCTCTTCTTATAGCAATCTTTATGAGCGTGTTTTGC	donor
Or59b 3' arm SapI RV	GGCTGCTCTTCGGACCCTTCCAGCTGCAGCGAAATCAC	donor
Or42b ge 5' F1	TAAACATAACATAGCGCAGCAGAG	genomic PCR & sequencing
Or42b ge 5' R1	ACCACACGAACGTCATTAGCGTCC	genomic PCR & sequencing
Or42b ge 3' F1	CTACCCCATCACTAGGTGGCAAAG	genomic PCR & sequencing
Or42b ge 3' R1	CTAGTATACCCTTTATCTCTACGAG	genomic PCR & sequencing
Or42b CRISPR5' chi FW	<u>CTTCGAGCAGAAGCGGTCCCGAGA</u>	sgRNA
Or42b CRISPR5' chi RV	<u>AAACTCTCGGGACCGCTTCTGCTC</u>	sgRNA
Or42b CRISPR3' chi FW	<u>CTTCGGTCTCGTTTTAGGGAAGAA</u>	sgRNA
Or42b CRISPR3' chi RV	<u>AAACTTCTTCCCTAAAACGAGACC</u>	sgRNA
Or42b 5' arm AarI FW	GGTACACCTGCGCAGTGCCTCGGCAGAGTTCTTCGTAGCCG	donor
Or42b 5' arm AarI RV	GGACCACCTGCCCTCCTACCGGGACCGCTTCTGCTCCGTGAGC	donor
Or42b 3' arm SapI FW	GAGTGCTCTTCTTATTTCCCTAAAACGAGACCCCCACAAAC	donor
Or42b 3' arm SapI RV	GGCTGCTCTTCGGACTGTTTGTGGCGATGATCGTCTATGG	donor
Or98a 5' geF1	GATGTGGTTAGCCTAGATTACAGG	genomic PCR & sequencing
Or98a 5' geRV	TGGCAAGTATACGGCACACCAAGC	genomic PCR & sequencing
Or98a 3' geF1	TGTTTTTCAGGTGGCTAAGCTGGC	genomic PCR & sequencing
Or98a 3' geR1	AACTTCCCTTCCAGCAGACAGCCC	genomic PCR & sequencing
Or98a CRISPR5' chi FW	<u>CTTCGTCAAAGGTTTTGTCGGATT</u>	sgRNA
Or98a CRISPR5' chi RV	<u>AAACAATCCGACAAACCTTTTGAC</u>	sgRNA
Or98a CRISPR3' chi FW	<u>CTTCGGAAGCTGACAAGTTAAAGG</u>	sgRNA
Or98a CRISPR3' chi RV	<u>AAACCCTTAACTTGTCTCAGCTTCC</u>	sgRNA
Or98a 5' arm AarI FW	GGTACACCTGCGCAGTGCCTTGTGCGTTGCCAGCGTGGGAACG	donor
Or98a 5' arm AarI RV	GGACCACCTGCCCTCCTACATTCGGCTTTCGACAGATAGTTGAAC	donor
Or98a 3' arm SapI FW	GAGTGCTCTTCTTATAGGGGATTAGAAGCAACTACCAAC	donor
Or98a 3' arm SapI RV	GGCTGCTCTTCGGACAGACAGACTCCTGCATTTCG	donor