

Supp. Figures and Tables

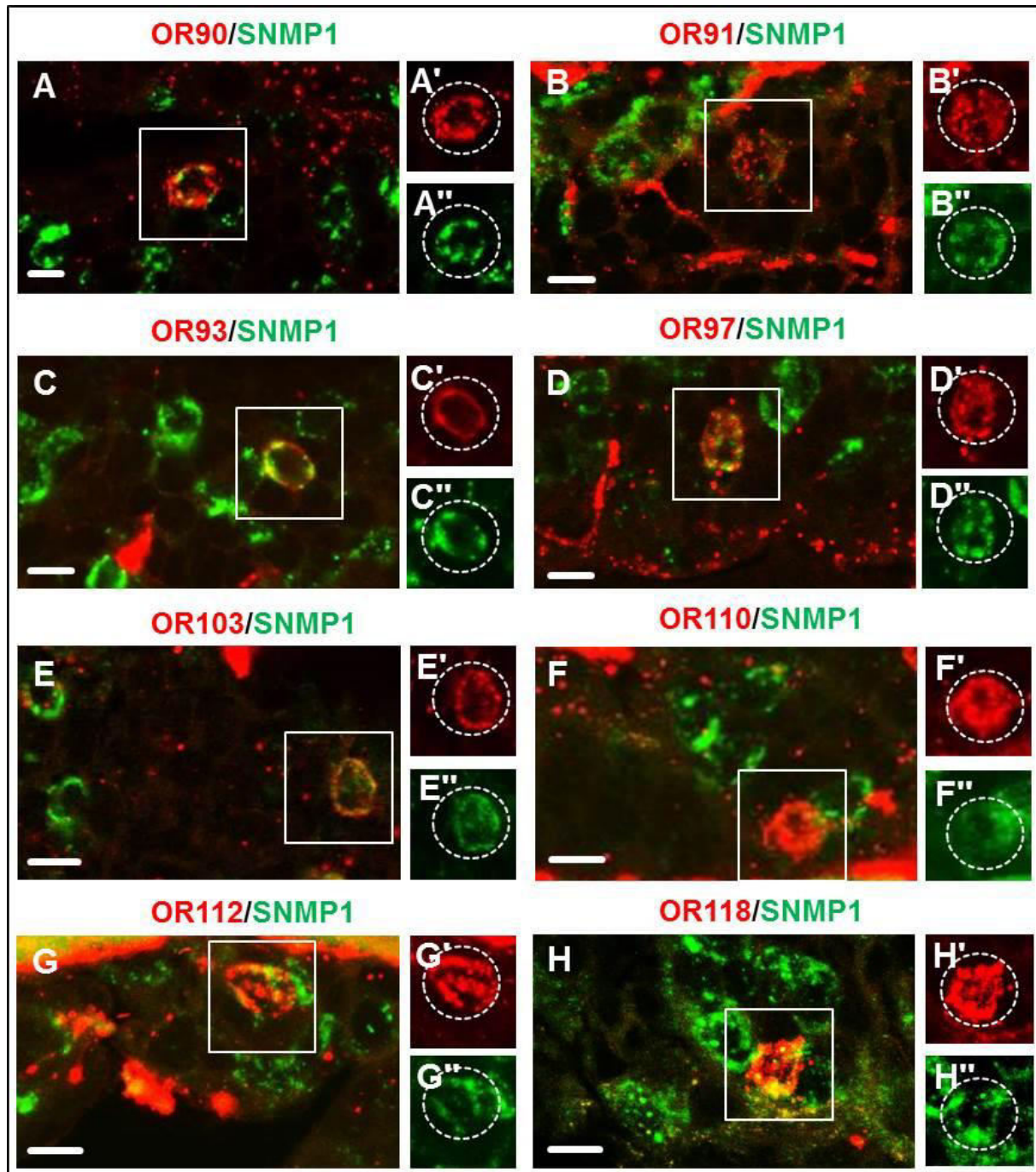


Fig. S1 Expression of SNMP1 and group II SgreORs.

(A-H) Expression of distinct group II OR types as well as SNMP1 was visualized by two-color FISH on antennal sections from *S. gregaria* using specific antisense riboprobes for SNMP1 (green) and SgreORs (red). (A'-H', A''-H'') High magnification images of the

boxed areas in A-H are shown in either the red or the green fluorescence channel. The dashed lines highlight cells that express the defined SgreOR types. Scale bars, 10  $\mu\text{m}$ .

Table S1

Oligonucleotides used for receptor cloning

OR ID	forward Primer (5' to 3' direction)	reverse Primer (5' to 3' direction)
SgreOR11	GACACAACGGCACCTGGCTCTTCC	ACGTCACAGCGTCGTAAGCTGCCAG
SgreOR13	CTCACACTGCTCAGCAGCAAAATTG	AGCAGCAGCGACCGTTTGTATGGACA
SgreOR16	ACTGTTGGAAAACCTGCACAGGAGGC	CACAATCGAGACGAAGGATTCCCTG
SgreOR22	GCTGCGGCATCGGATTTCTAGTAA	TCCTGATGAAGGCTTCCCTGGAGAG
SgreOR23	GTCTCGCTCCACCAGCGCATCATCA	GCAGCACAGTGAAGTATGAGTAGG
SgreOR25	ATGTGCTCTGGGCAGCCAGCTCACA	CAGTCGGAGTTGAGCTGCCTCAGCA
SgreOR26	GTGGTGATCCTGCTGCTGTTTCGTGG	CGTGGAGTCAGCGTTCTTAGCGATG
SgreOR27	CATCTCGTGCATCGTGGACGCTTTC	GCTGATCTCCCTCAGTACCGCAAAG
SgreOR28	CTTCACGTCCCAGACGGCTTCTTC	CAGCAGCGCGAAGTACGAATAGGAG
SgreOR29	TCTTACCACGCTCTGCTTCGCCTT	CGCTCTCCAAATAAACTTCGCCTCC
SgreOR30	GGTAATGGGACGTTGGAGAGACACC	GCTTCGTGCTGGGGTTCGTTTCATCT
SgreOR32	CGTCCTGCTTCAGTTCACAGGAGCT	CCGTTACCTGGTTGAGAAGAGCGT
SgreOR34	CCATCCTGAGCGCGTCGTACAAGTC	CTGTAGCGCCCAAGAACTGGAACAG
SgreOR37	CCTGTCGTGTGCTGGTACGGTTCGT	CCCATCCGCATACCAGCAGTACATG
SgreOR38	GATCACTGCCAACAATAGCATGGTATCC	CTGTGTGCTTTATTTGCCTCAGAACTGC
SgreOR40	CTTCTCGTTGATTTCTCTGCTGC	CAGAGCAAAAGCGATGGCGAGGTT
SgreOR52	TCCGTGCGAAGCCGTGATCCACATCA	TTGTCAGTCGCCGCAGCCTTACGAG
SgreOR54	AGTGCACCGCCACTTTCTTCTGCT	GAGTAGGTACCTGCAAAAGCGAGA
SgreOR61	AACTGCTACGAGGGTTCTGAGGAAG	TAGCGGTTGTGGATGCGGCTCAGCA
SgreOR62	GTCCAGAGCGCGTCGTCCGTTCATAT	CGAGGCATTACCAGCGAGACAAAG
SgreOR66	GGGCGTGTGGAACGCAGTAGAGAGT	CATCGGGTAGAGGTGCGCAGCGGTG
SgreOR68	CATCCTACACGACTCCCGCAAACAT	GCACTAATGTCCTCACCGTATGTCG
SgreOR71	TCACGAAGGGGCTGCTACTGCTCAT	AGACCGCCTCTGCCTGTGCTGTTAC
SgreOR80	ATGGCATCCTTCGCCTTCTCGTCCA	CTCCCTGGAGAGGGGGAAGAACCCG
SgreOR88	ATGTCTCGCAGGATCAACCGCTGCT	AAACACCGTGCCACA AAGGTTAGCC
SgreOR89	ATGCCGGCCTTCGTCGCCCTCAAGC	TTTCCGAAAATGCAGTACAATCCCG
SgreOR90	AGACTGTGTGCTGATTTTCCAGAAG	TGCTTCGACAGCTGACACGTCTTT
SgreOR91	ATGGGAAAGCCTTCAAACGATCCTG	GTTGTGATTTGGCCGAAAAGACAG
SgreOR92	TTCTCAGCTCTCAAGCTTATCATG	CACCGTGATCTCCAGAGGCTTCTTG
SgreOR95	TTGGTCCCGGAGCGTCCATACGGCG	GAGGAGGCTCCTCTTGAAGCGGGCG
SgreOR96	GCCTGGCTGTCCATTTTCGCTGCC	CACTCTGATCAGTTAAGATCTGCC
SgreOR98	CTTTTTAGCAGCAATGGTGAGGTCG	TATTGCTGGATAATGCAATCGTCG

SgreOR101	CTTGCTGCTGTGCGCCTTCTACTCGG	TGTGCTATTCAGGCGATAACAACATG
SgreOR102	CAGCGCCGCTACTGGGACTGCAGC	CTAGCTTTTTCCGTTCTTGTGCGCTC
SgreOR103	CGCAGCTCAGTGCGTTGCCCTGAC	ATGGAAATAAATAGATTTCCGCAC
SgreOR106	CTGCCACAAGGACACTCCTCCAGCA	TGGTTCTTCTTCACCGACTGTTTGG
SgreOR107	ACAACCGGGAAGTGGGCCCATCCGC	AGAATCTGCAAGAAGGTCTCCCTGG
SgreOR108	GTGCACCAATTGTAGCTCCTGGACC	CCCTGATACTGAGGGGCTGTGACGC
SgreOR109	GATGACGCAAAGAGACGACTATACG	GAAAGAGTTTCTGGAGAGTGTGAAG
SgreOR110	ATGGTGTGCGTTCTAGTACGGCAGA	GATCATCATGTTGAAGATCGTGTAC
SgreOR111	ACACCATCA ACTGATTTTGGTCTAC	CTATTTCTGCACTCCGTGTAACATG
SgreOR112	CAGACCCTCATGTGCGCCACCAGCCG	CTGCCGCTTGCAGATTAACAGCAT
SgreOR113	GCACCAGAGGTAGATGCAGATAGTC	GAATGAGTTCCTGGAGAGCGTGACG
SgreOR114	GCGTCTTCGTGCTGCTGCTCAACCT	GAAGGTGCGCTTGGAGAGGGTGTAC
SgreOR116	TGGAGAGGGTGATGGGCCAGTCCAT	TCGAACAGCAGGTTGAACACCGTGT
SgreOR118	GATGTGCCGGTGCATAGTACAACGC	GATCCGTTCCAGCACCTGACGAAGG

Table S2

Oligonucleotides used to analyze the expression in male and female antennae of group II OR types co-expressed with SNMP1.

OR ID	forward primer (5' to 3' direction)	reverse primer (5' to 3' direction)
SgreOR84	GTCCCGAATCGTCACGAAGACCGAC	TCAGTGCATACTGTACAGCATATTC
SgreOR85	CTGTGCAGCCTTGTGCTACTATCG	CTGGAGCACAGGTTTGCCATGTTG
SgreOR86	GGCTACGGTTCTGCAGTGAAGATAG	GTTTGAAGCGAGCGTCACTGTTGAC
SgreOR88	GTTGTCTCAGGCCACTGTATGCATG	TCTCGAGCGGACGCATCGTGCCAC
SgreOR90	AGACTGTGTGCTGATTTTCCAGAAG	TGCTTCGACAGCTGACACGTCTTT
SgreOR91	ATGGGAAAGCCTTCAAACGATCCTG	GTTGTGATTTGGCCGAAAAGACAG
SgreOR92	TTCTCAGCTCTCAAGCTTATCATG	CACCGTGATCTCCAGAGGCTTCTTG
SgreOR93	CTCTACGGTGTTCAATCTTTCAGCG	CATAAGATCCATTACAGCACCTGCAC
SgreOR94	TTATGGCAACGGCAAAGCAGTCAC	GCGTCGCAGTCTGCCAGTCACAGC
SgreOR95	TGCTCGCCAGTTCCCCGTACCACTG	GCCCACCGTGATCTCCAGAGGCCG
SgreOR96	ATCCGACTCCGAAACCAGAAGCTGG	CAGCTTCTCACTCTGATCAGTTAAG
SgreOR97	CAGGTGTCGACAATGGTGGCCTCT	GAGAGTTTGCAGTTTTTCCCACAG
SgreOR101	CTTGCTGTCGTGCGCCTTCTACTCGG	TGTGCTATTCAGGCGATAACAACATG
SgreOR102	GTGGTCGGTGCAGCCGCTGATCTC	CATTCAGCACCTGCACGAACGTGG
SgreOR103	CGCAGCTCAGTGCGTTGCCCTGAC	ATGGAAATAAATAGATTTCCGCAC
SgreOR109	AAGATGAACATTCAACACCATCAGG	GAATATTGTGTACGAAACGTTTCATG
SgreOR110	GATCGTACTCCTTGTTAGCGTTGTC	CATCATGTTGAAGATCGTGTACGATG
SgreOR111	AATCGATCAGAGTGAGCGCCTGGTG	CTATTTCTGCACTCCGTGTAACATG
SgreOR112	TACTGGAAGCTACACAGCAGTTTAG	ATGAATTCCTGGACAGCTCGACGAG
SgreOR113	TCAGCGGATATTTAGTTGCACCAG	TTAGTGCCTGCAGGAATGAGTTCC
SgreOR114	GCTGCAGGTGTTCAACATCGTCGTC	GAGGAAGGTGCGCTTGGAGAGGGTG
SgreOR116	GACCAAGATGCTCTTCACGTTTCGTC	CAGGTTGAACACCGTGTAGGACATG
SgreOR118	GTCAGTCTAGCCTGCTGCAAAGTG	GATCCGTTCCAGCACCTGACGAAGG

actin	ATGGCTACTGCTGCATCCTC	CACATCTGCTGGAAGGTGGA
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