

Supporting Information

Antennal RNA-sequencing analysis reveals evolutionary aspects of chemosensory proteins in the carpenter ant *Camponotus japonicus*

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Supplemental Tables

Supplemental Table S1. Nucleotide sequences of primers used for cloning of

CjapCSPs.

Lower-case letters indicate additional sequences for restriction enzyme recognition.

Gene	Forward primer (5'-3')	Reverse primer (5'-3')
<i>CjapCSP1</i>	aaggatccGAGGAAATGTACTCGG ACATG	aactcgagTCAACGGGTAAAGGGGATG
<i>CjapCSP2</i>	aaggatccGCCGAATCGGACAATA GCG	aactcgagTTATGAAACTCCAGCGTATT GTTG
<i>CjapCSP3</i>	aaggatccCGGCCACAAGACCATT ATAC	aactcgagTTAATTTTCTTTCTTCAAGG CTCGATC
<i>CjapCSP4</i>	aaggatccGAGGACGTGCAGTATA CTAC	aactcgagTCAATCCAATCTGCCTCCTT C
<i>CjapCSP7</i>	aaggatccGACGATAAGTACACGA CCAAG	aactcgagTCACGCTTTTATGTTGCGTT TCTC
<i>CjapCSP12</i>	aaggatccGAGGAAGAGAAATACG AGGATAA	aactcgagTTATTCTTTAGCTTTTTTCTT CATATCTTCTAAA
<i>CjapCSP13</i>	aaggatccGAAGAACTTTATAGCG ATCAGTACG	aactcgagTTATTGACCAGCATTCTTCT TTTTCATATCTTC

Supplemental Table S2. Nucleotide sequences of primers used for RT-PCR.

Gene	Forward primer (5'-3')	Reverse primer (5'-3')
Elongation factor 1 (<i>ef1</i>)	CCCTTCGTCTTCCCCTTCA	ACCATACCGGGTTTCAGCA C
60S ribosomal protein L32 (<i>rpl32</i>)	CCAACAGGCTTCCGTAAAG TTC	TCTCTGCACAAAACCTTGCGA TT
60S ribosomal protein L18 (<i>rpl18</i>)	AAGAAACCTGGACGGGAG AA	CGAGCTCTTTCGGTTACACG
Glyceraldehyde-3-phos phate dehydrogenase (<i>gapdh</i>)	CATGACGACTGTACATGCG ATT	GCAGCGGGAATAATGTTTT G
<i>CjapCSP2</i>	ATTCGCGACGAAATGTCGA A	CTGGGGACGATTCTCGGTGT
<i>CjapCSP2</i>	GCGACAAGCGTTACTTGAC C	CAGGAGCCTCTCAAAACCA A
<i>CjapCSP3</i>	CAAATGCCCTCTGAAGCT C	CGCCTTTCTCGCAATTTCTT
<i>CjapCSP4</i>	AGATGCGGCGGAACTCAA	CGCTGTTGCAATTTAAACG A
<i>CjapCSP5</i>	CAGGGGATTGCGATGGATT T	CGGGGTACAACGACGACAT TT
<i>CjapCSP6</i>	GGTGTGTTGTTGGACGAAGG A	TTCTGCCGTAGCCTTTTGT T
<i>CjapCSP7</i>	TGCCTGCTGGATAAGGGAA A	GCATTTGCTGCACTCGGTCT
<i>CjapCSP8</i>	CCGATGCACGCAGTCTTAA A	TGCCTATTTTTCTTGCTCCT G
<i>CjapCSP9</i>	TACGGGATCTGCACGCTTC T	TCGGTAATCGCATTGAGAA TGT
<i>CjapCSP10</i>	GTGCAAGACAGCTGATCAA AGA	ACCAATCGAGTACGATTTCC AA
<i>CjapCSP12</i>	GTTTCATGGCAACAGGACC A	TGCACTTAGTTTGAAAAGCC TCAC
<i>CjapCSP13</i>	CCATGTCTAACAGCAGAAG CAAA	TCAACGATCTTCTGCCATTT GT

Supplemental Table S3. Nucleotide sequences of primers used for *in situ* hybridization

Lower-case letters indicate additional sequences for restriction enzyme recognition.

Note that the same primers listed in gene cloning (Supplemental Table S1) were used for *CjapCSP12* and *CjapCSP13*.

Gene	Forward primer (5'-3')	Reverse primer (5'-3')
<i>CjapCSP1</i>	GGACATGTTTCGATCACATCAA	CCTCGAAAACACTACACATGATGC
<i>CjapCSP12</i>	aaggatccGAGGAAGAGAAATAC GAGGATAA	aactcgagTTATTCTTTAGCTTTTTTC TTCATATCTTCTAAA
<i>CjapCSP13</i>	aaggatccGAAGAACTTTATAGC GATCAGTACG	aactcgagTTATTGACCAGCATTCTT CTTTTTCATATCTTC

Supplemental Dataset

Supplemental dataset S1. Nucleotide sequences of twelve annotated CjapCSPs

Supplemental dataset S2. Amino acid sequences of twelve annotated CjapCSPs