

SUPPLEMENTARY MATERIAL

Socially cued seminal fluid gene expression mediates adaptive responses in ejaculate quality to sperm competition risk

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Table S1. Primer and reporter sequences for the gene expression assays

Gene	Transcript	Forward primer	Reverse primer	Reporter sequence
<i>Actin</i>	Isotig01761	TGCCATTCTCCGATTGGATCTG	ACGCTCGGTAAGGATCTTCATG	CTGGCCGTGACTTGAC
<i>ToSfp001</i>	Isotig01262	GTAGTGATAGTGCAATCTGGTTACGA	CACAATTTCCCGCCTTCATC	TTTGACCGCCGT
<i>ToSfp005</i>	Isotig01832	GCGTGTTGCGCCTCTTC	CGTCCTCAGGACTGGAGTCA	CACGCTCACGCACTCC
<i>ToSfp007</i>	Isotig00263	GCAGAGTACCCATATCAGGTTTCAC	AGTCAGCACTTGTGACAAAAAATTT	TCGGCGTACATAAATG
<i>ToSfp011</i>	Isotig01709	GCCGAGCAACTGCTGAC	CCGCCTCCTCTTCCTCCTT	TCTCCGCCGCCTCGTC
<i>ToSfp017</i>	Isotig05129	TCGTGGGTGCGGAGTG	CGGCCTTGGCCACGAA	CAGGGCGTGGACCGG
<i>ToSfp022</i>	Isotig00444	GCCGAGCCGGAGGTA	GCTTCTCCACGGCCTTGA	TCCCGCCCCTGCCGC
<i>ToSfp023</i>	Isotig00811	CCAGCAGCTGGTGGAGAAC	GGATGATGTGCCAGTCAACGT	CAACGCCGACCTCATC
<i>ToSfp024</i>	Isotig02293	AGAGCATCATGCCAGAATTCCA	GTGGTGAGGGAGCCATTGTAC	CCCGTGCGACTACTTC
<i>ToSfp026</i>	Isotig06304	GCGAGTTACTTTTTCTTGACAGAATC	CCACTTCTTGCTGAAAAGATGAACAA	TCTCGCAGACATTCTT
<i>ToSfp027</i>	Isotig00169	GGGCGCTACTTGATCATG	ACGAAATGCCGCCAGTAA	ACCCCTCCCACGCTCT
<i>ToSp009</i>	Isotig00560	TGCTGGCAATAAACTAGCTATGCAA	CTTCACATCCCATTTTCATAGCTTCAG	CAGGAGCTGCATCTTT

Table S2. Primer sequences for dsRNA*

Gene	Transcript	Forward primer	Reverse primer	Product length
<i>ToSfp001</i>	Isotig01262	TACGAGCCGTTGGAGGACTA	TTTGGAGTGCTTCGTGCGAT	444
<i>ToSfp005</i>	Isotig01832	ACAAGGACGCTGTGGAGATG	ACGAGTGCGAGAAGATGACG	435
<i>ToSfp011</i>	Isotig01709	AGCCCTCAGACAACAAGCTG	GAAACTCACAGGAGGTCCCG	579
<i>ToSfp017</i>	Isotig05129	CTCAGATACCTCGGCGTCAC	GGCGAAGATCCAGTGGAGAG	372
<i>ToSfp022</i>	Isotig0444	AAGCGAAGAAGGACGAGGTG	CGCTTAAGAGCTGGGCTTCT	524
<i>ToSfp023</i>	Isotig0811	TACCTGAAAGAGCTGGCAGC	TGCTGCAGTCTCAGGTTTCAG	465
<i>ToSfp027</i>	Isotig0169	TCGGGGGTGGTTTTTGTCAA	ACGTGAACGAAGATGTTAAACGA	398

*T7 promotor sequence 5'-TAATACGACTCACTATAGGGAGA-3'

Table S3. Principal components analysis on the covariance matrix of expression values for seven seminal fluid protein genes that were up-regulated in response to male calls

	PC1	PC2
Eigenvalue	1.639	0.235
Variance explained (%)	76.96	11.02
<i>ToSfp001</i>	0.006	0.037
<i>ToSfp005</i>	-0.030	0.970
<i>ToSfp011</i>	0.111	-0.004
<i>ToSfp017</i>	0.987	0.009
<i>ToSfp022</i>	0.035	-0.060
<i>ToSfp023</i>	0.033	-0.008
<i>ToSfp027</i>	0.097	0.231