

S2 Table: List of PCR primers used in this study. The primers are used for qPCR.

Target gene	Sequence (5'-3')	Reference
REFERENCE GENES		
Actin	F: TGCCAACACTGTCCTTTCTG R: AGAATTGACCCACCAATCCA	[1]
Enolase	F: GGTGATGAAGGTGGTTTTGC R: GATGCAGCAACATCCATACC	[2]
GAPDH	F: GATGCACCCATGTTTGTGTTG R: TTTGCAGAAGGTGCATCAAC	[2]
eIF3-S8	F: TGAGTGTCTGCTATGGATTGC R: TCGCGGCTCGTGGTA	[3]
MGST	F: TTGCTCTGTAAGGTTGTTTTGC R: TGTCTGGTTAACTACAAATCCTCCTG	[4]
RP49	F: CGTCATATGTTGCCAACT R: TTGAGCACGTTCAACAAT	[5]
RPL8	F: TGGATGTTCAACAGGGTTCATA R: CTGGTGGTGGACGTATTGATAA	[6]
RPL13a	F: TGGCCATTTACTTGGTCGTT R: GAGCACGGAAATGAAATGGT	[2]
RPS5	F: AATTATTTGGTCGCTGGAATT R: TAACGTCCAGCAGAAATGTGGTA	[6]
RPS18	F: GATTCCCGATTGGTTTTTG R: CCAATAATGACGCAAACCT	[2]
TBP-af	F: TTGGTTTCATTAGCTGCA R: ACTGCGGGAGTCAAATCT	[7]
Target genes		
AChE-1	F: AGTTGGGCGAGATATGGTTG R: GGAAAAATAGAGCGCGTGAG	This study
AChE-2	F: AACCGGCTTAAGGATTCGAT R: CCCTCTCCCCTTCAATCTTC	This study
CYP6AS1	F: GCGACCAATGCGAATGAAAC R: TCACGGCATTCCACCATTTT	This study
CYP6AS3	F: TCGAAAGGGACGAGGATATG R: AGTCATGGGATGCCTACTGG	This study
CYP6AS4	F: GGCTGGATTTGAAACGTCAT R: CGCGTGGAATTCTTTCATT	This study
CYP6AS10	F: TTTCTCAAAATTCGCCCCATC R: CGGGGACAATTCGTTCTTA	This study
CYP9Q1	F: GTTCACGTCGAGCAAGATCA R: TCGTCAACACGCTCTTCAAC	This study
CYP9Q2	F: CCTGATCAAGAGCATCACGA R: GATCTTGCTCGAGGTGAAGG	This study
CYP9Q3	F: GTAGCCATTCACGCGTTCAC R: GTCTCGTCGATCTCCTGCTG	This study
CYP450	F: GGCCGGTCAAAATGGTGTTT R: AGGATGGCAACCCATCACTG	This study
Abaecin	F: CAGCATTCGCATACGTACCA R: GACCAGGAAACGTTGGAAC	[6]
Apisimin	F: TGAGCAAAATCGTTGCTGTC R: AACGACATCCACGTTTCGATT	[6]
Defensin1	F: TGCCTGCTAACTGTCTCAG R: AATGGCACTTAACCGAAACG	[6]
Defensin2	F: GCTGCTACCACTACGACATC R: CAACTACCGCCTTTACGTCG	[6]

Vitellogenin	F: ACGTAATAAATGCCGCCAAG R: TGCATGTTGCTCTCCAAC	This study
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GAPDH: glyceraldehyde 3-phosphate dehydrogenase; MGST: microsomal glutathione s-transferase; eIF: eukaryotic initiation factors; PRM: protamine; RP: ribosomal proteins; RPL: ribosomal proteins of the large subunit; RPS: ribosomal proteins of the small subunit; SRC-C: scavenger receptor class C; TARBP: TAR RNA-binding protein; TBP-af: TATA box binding protein - associated factor; TRBP: TAR RNA-binding protein; AChE: Acetylcholinesterase; CYP: cytochrome P

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- [2] Scharlaken B, de Graaf DC, Goossens K, Brunain M, Peelman LJ, Jacobs FJ (2008) Reference gene selection for insect expression studies using quantitative real-time PCR: The head of the Honey bee, *Apis mellifera*, after a bacterial challenge. *J Insect Science* 8: 33
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- [7] Lourenço AP, Mackert A, Cristino AS, Simões ZLP (2008) Validation of reference genes for gene expression studies in the Honey bee, *Apis mellifera*, by quantitative real-time RT-PCR. *Apidologie* 39:372–385.