Supplementary Material

Table S1. Primers used to amplify the full-length *BdCHS1* cDNA from *Bactrocera dorsalis*.

PCR fragment	Direction[a]	Type[b]	Nucleotide Sequence (5′–3′)	Size (nt)
1	F	S	TCGTACGTCCGATGTATTCGGC	1694
	R	S	GACGACATTCAGATTGATGAT	
2	F	S	GGTGGAACAGGCTAGAATTGCT	383
	R	S	CTATCAAAGCGTCCTGTGAAG	
3	F	5′-RACE Adapter	CTAATACGACTCACTATAGGGCAAGCAGT GGTATCAACGCAGAGT	1462
	R	S	GAAACCAGTTACTTGTGCCGC	
4	F	S	CCAGCAACTCCGATACTCACG	499
	R	3′-RACE Adapter	CTAATACGACTCACTATAGGGCAAGCAGT GGTATCAACGCAGAGT	

[a] F: forward primer; R: reverse primer
[b] S: specific primer

Table S2. Primers used for qPCR analysis and dsRNA synthesis of *BdCHS1* and its two alternative splicing variants.

Purpose	Gene name	Direction	Nucleotide Sequence (5′–3′)	Size (nt)	Positions corresponding to the nucleotides in Fig. 2
qPCR analysis	*BdCHS1*	F	ATCGGTGCCTTCATACGTTC	218	448–665
		R	CGTGACAAAAGCCCCAGTAT		
	BdCHS1a	F	AATTGCTAAAGATCTTAAAGAGTTGC	169	3789–3957
		R	TTGTGTGGATTCGTCGTAGG		
	BdCHS1b	F	CATCGCAGCCGATCTCAT	150	3789–3938
		R	GTTATATTTGTCTTGACGCCCAGT		
	α-Tubulin	F	CGCATTCATGGTTGATAACG	184	—
		R	GGGCACCAAGTTAGTCTGGA		
dsRNA synthesis	*BdCHS1*	F	TAATACGACTCACTATAGGGATTCTTGATTGCTATGACGG	417	3039–3455
		R	TAATACGACTCACTATAGGGATGGTGTTTAATGACTCGGC		
	BdCHS1a	F	TAATACGACTCACTATAGGGGCTAGAATTGCTAAAGATCTT	177	3784–3960
		R	TAATACGACTCACTATAGGGCTCTTGTGTGGATTCGTCGTA		
	BdCHS1b	F	TAATACGACTCACTATAGGGGCACGCATCGCAGCCGATCTC	177	3784–3960
		R	TAATACGACTCACTATAGGGCTCTGATGTCTCTTCAATATA		
	GFP	F	TAATACGACTCACTATAGGG CAGTTCTTGTTGAATTAGATG	436	—
		R	TAATACGACTCACTATAGGG TTTGGTTTGTCTCCCATGATG		

F: forward primer; R: reverse primer