Supplementary data

Table S1. Primers used in this study

Primer	Uses	Sequence (5′ - 3′)	Annealing temperature (ºC)	Expected size of PCR product (bp)
SePGDS	RT-qPCR	GAGAAGGATGAGGCTGTAAAGG ACATGGCCGTTGTTCTTAGT	52	110
SePGDH	RT-qPCR	GCCATCCTGCTGGACATAAA CCGCTACCTCCATTATCCTTTC	50	287
SePGR	RT-qPCR	GATCCCTACCAGCGAATGAAA AGTGCAAGAGACACAGGTAAAT	52	236
SePGES	RT-qPCR	GAGTCCTGGTCAACACACTATC CACTGTCACGTCGGCTAAA	52	308
T7_SePGDH	RNAi	<u>TAATACGACTCACTATAGGGAGA</u>GCCATCCTGCTGGACATAAA <u>TAATACGACTCACTATAGGGAGA</u>CCGCTACCTCCATTATCCTTTC	50	333
T7_SePGR	RNAi	<u>TAATACGACTCACTATAGGGAGA</u>GATCCCTACCAGCGAATGAAA <u>TAATACGACTCACTATAGGGAGA</u>AGTGCAAGAGACACAGGTAAAT	52	282
dsCON	RNAi	CCCACTAGTGTCCTCATCACCTCCTCAAAC CCCAAGCTTCAGAGTCACCGTTGCAAGTA	52	520
RL32	RT-PCR and RT-qPCR	ATGCCCAACATTGGTTACGG TTCGTTCTCCTGGCTGCGGA	52	270

* T7 promotor sequence is underlined.

Table S2. GenBank accession number of different species used in phylogenetic analyses

Species	Acronym	GenBank accession number
Plutella xylostella	PxPGDH	XP_011559858.1
Helicoverpa armigera	HaPGDH	XP_021193431.1
	HaPGR	XP_021185469.1
Culex quinquefasciatus	CqPGDH	XP_001867363.1
Musca domestica	MdPGDH	XP_005190984.1
Trachymyrmex zeteki	TzPGDH	KYQ48859.1
	TzPGR	XP_018300833.1
Nylanderia fulva	NfPGDH	XP_029174260.1
Tribolium castaneum	TcPGDH	XP_015837535.1
Leptinotarsa decemlineata	LdPGDH	XP_023020854.1
Aethina tumida	AtPGDH	XP_019866919.1
Homo sapiens	HsPGDH	NP_000851.2
	HsPGR	AAH35228.1
Mus musculus	MmPGDH	AAB41825.1
Sus scrofa	SsPGDH	NP_001177177.1
Bombyx mori	BmPGR	XP_004932223.1
Agrilus planipennis	ApPGR	XP_025829394.1
Anoplophora glabripennis	AgPGR	XP_018575740.1
Sitophilus oryzae	SoPGR	XP_030753535.1
Cyphomyrmex costatus	CcPGR	XP_018394920.1
Acromyrmex echinatior	AePGR	XP_011055270.1
Aedes aegypti	AaPGR	XP_021694721.1
Contarinia nasturtii	CnPGR	XP_031627908.1
Pan paniscus	PpPGR	XP_003810914.1
Macaca mulatta	MmPGR	XP_014972591.1