

Supplementary Table S1. List of primers used for qPCR to validate the ABC transporter genes expression during mosquito development and post-arboviral infection (as mentioned in materials and methods Sections 4.5–4.6).

Gene Name	Forward primer	Reverse primer	Source
<i>AaeABCC9</i>	CTTCCCAGACGAACAGCCTA	CCTTGACAATGACCGGCAAA	Present study
<i>AaeABCC13</i>	TTGCTCTCGATTACCTGGGG	ACACGATGTCTCCCTTCTGG	
<i>AaeABCE1</i>	AGGAGAACTGCAGCGTTTTG	TCATCCGGCTCCAGATTACC	
<i>AaeABCF2</i>	CCAGTGC GTTATGGAAGTCG	GCAAGCGTCCAAATCGAGAT	
<i>AaeABCG11</i>	TGACGGTGCTGGAGAATATG	CGTAGAGGCCAAGTACAGTTAG	
<i>AaeABCG13</i>	GAAACGATCGCCATGCAAAC	ACGATACAGGTCAGCAGGAG	
<i>AaeActin</i>	GAACACCCAGTCCTGCTGACA	TGCGTCATCTTCTCACGGTTAG	[65]
<i>AaeS6</i>	CGTCGTCAGGAACGTATCCG	TCTTGGCAGCCTTAGCAGC	[56]

Supplementary Table S2. List of immunity related transcription factors identified in the 5' UTR sequences of representative ABC transporters and their functions [67].

Transcription Factor	Functions of Transcription factor
Rel	Innate immune response, Toll signaling pathway
STAT	Defense response, The Janus kinase-STAT pathway is also connected to insect early development
Ets21C	Defense response to bacterium
Bgb	Regulation of hemocyte proliferation
Cnc	Response to oxidative stress
Schlank (Sch)	SREBP signaling pathway, a sterol response element-binding transcription factor (SREBP) to result in up-regulation of target gene transcription