

**Supplementary Table 1.** DNA sequences of the primers and probes used to detect *kdr* mutations in body lice.

Primer or probe	Sequence	Exon and a.a. position <sup>a</sup>
Seq1 F (forward)	ACCCATTCGTCGAATTATTCATAACT	exon 1  M815I
Seq1 A (reverse)	CCCCGCATTAATAAATTTTAC	
Seq1 mut	TCTGTCCATGTCTTTATCC <u>AT</u> GTC- <b>FL</b> <sup>b</sup>	
Anchor Seq1	<b>LC-640</b> -TGATGATCCAAAGCCATAAATAGTGTGTT- <b>P</b>	
Seq2 S (forward)	TTTTTTCTTTTATGACGAAAC	exon 3  T917I and L920F
Seq2 A (reverse)	CCCGTGTAATTTTTCCA	
Anchor 1	AATTTCAATTATGGGTCGAACTGTTGG- <b>FL</b>	
Sensor 1 C	<b>LC-640</b> -GCTTTGGGTAATTTAA <u>C</u> ATTCGTC- <b>P</b>	
Sensor 2 C	ATTCGTC <u>CTT</u> TGCATTATCATATTCAT- <b>FL</b>	
Anchor 2	<b>LC-640</b> -TTTGCCGTTATGGGAATGCAACTT- <b>P</b>	

LC-Red 640 and fluorescein are fluorophores. The 3' end of the one of the two probes in each pair was phosphorylated to prevent probe elongation by Taq polymerase during the PCR.

Bold, codons; underlined, mutated bases.

<sup>a</sup>The amino acids are numbered according to GenBank accession no. AY191155

<sup>b</sup>**FL**, fluorescein; **LC-Red 640**, LightCycler-Red 640; **P**, phosphorylated.

**Supplementary Table 2.** Programs for real-time PCR to detect *kdr* mutations using the LightCycler apparatus 480.

Mutations	Primers	Size	LightCycler <sup>®</sup> 480 Program		
			Denaturation	Amplification	Melting
M815I	Seq1F/Seq1A	144 bp		95 °C; 01 sec	95 °C; 1 sec
				60 °C; 10 sec	40 °C; 30 sec
				72 °C; 06 sec	80 °C;
T917I	Seq2S/Seq2A	203 bp	95 °C; 15 min	95 °C; 01 sec	continuous
and or			51 °C; 15 sec	transition rate:	
L920F			72 °C; 10 sec	0.1 °C/sec	