

**Table S1.** Primers for Quantitative Real-Time PCR (qRT-PCR).

Gene	Accession no.	Sequence	Annealing temperature (°C)	Amplicon size (bp)
CYP1A1	NM_205147.1	FW: GATGTCCGCGTCCAACCC REV: GCGGTTGTACGGTGTCAA	65	86
CYP1A2	NM_205146.2	FW: CGCAGATCCCAAACGAGAAG REV: GCGGTTGTACGGTGTCAA	62	76
CYP2A6	KX687985	FW: CCCTCTCCTAAACAGATGCG REV: TTGCTGTCTCCCATCCTGC	64	149
CYP2H1	NM_001001616.1	FW: TCCTTCCCCTTAATGTTCCACA REV: GGGAGACAGCAAAGGGAATATC	62	98
CYP3A4	NM_001329508.2	FW: TGGTAGTCATGATCCAGCC REV: GGGGTCAATGTTCTCTCCGT	66	113
EPHX1	XM_419386.6	FW: TCCTCAATGCGTTTCTACAAAGA REV: TCATTAGGAAAGGAGGCAATGC	63	107
EPHX2	NM_001033645.1	FW: CAAGGGCATGGAGGAGTGG REV: GCCTCTCCATTTGTGTCCAA	66	80
GSTA1	NM_001001777.1	FW: TTTTAGCGGTGGAAGAGTCG REV: GGGGATATTGCTTGTCTTGCT	62	86
GSTA2	NM_001001776.1	FW: AGCAGCCGATGTGAAAGAAAA REV: GCCAACAAGATAATCCTGACCA	62	115
GSTA4	XM_015284816.2	FW: AGAGAGCCCTGATCGACATG REV: CTCTCTGTTGCCTTCTCTGC	62	130
GSTM2	NM_205090.1	FW: CAACCTGAGCCAATTCCTGC REV: GCGCCGTGTACCAGAAAAT	66	104
Nrf2	NM_205117	FW: AATCAAACCTCAGCCACCCAG REV: CAGCCAGGTTGTCGTTTTCA	64	142
CAT	NM_001031215.2	FW: GGCAGTCTGGACAAATACA REV: AAGTGGCTTGCCTGTATGTC	61	71
GPX1	NM_001277853.2	FW: TTCGGGCACCAGGAGAACGC REV: TGGTGAAGTTGGGTTTGAAGC	66	91
SOD1	NM_205064.1	FW: GGGAGGAGTGGCAGAAGTAG REV: CCCTCTACCCAGGTCATCAC	63	115
SOD2	NM_204211.1	FW: GGAGCAGGGACGTCTACAAA REV: CCCAGCAATGGAATGAGACC	62	81
ABCB1	NM_204894.1	FW: ACAACAGTCGGGAGGTGTC REV: GCTGTGTTCCCTTGTCTCCT	62	123
ABCC2	XM_015288821.2	FW: TCCTTGTTCTTTGTCAACCACA REV: AGTAGGCAGACACGCGATAA	64	122
ABCG2	NM_001328490.1	FW: TCCTTGTTCTTTGTCAACCACA REV: AGTAGGCAGACACGCGATAA	62	124
PGK2	NM_204985.2	FW: CTGCTGGCTTCCTGATGAA REV: TCCTGAACTTTAGCTCCTCCA	62	103
RPS7	XM_001234708.4	FW: GCCCAAGCCAACGAGAAAA REV: TTTACGCGGATTCTCTTGCC	65	138
GUSB	NM_001039316.2	FW: TGATTGGGGAACATCTGGA REV: CGTTGGCGGGTAAATATTCCT	62	97
HPRT	NM_204848.1	FW: ACGTTGCTGTCTCTACTTAAGC REV: CCCACACTTCGAGGAGTTCT	61	86

*Italicized gene names indicate the internal control genes used as references.*

**Table S2.** Matrix-matched regression curves and related R<sup>2</sup> and SSE (%) values

Toxins	Calibration range	n° exp. points	Matrix-matched calibration curve	R <sup>2</sup>	SSE (%)
AFB1	0.05-5 ng/mL	5	$y=6.12x-0.04$	0.999	103
AFB2			$y=22.49x+0.09$	0.999	98
AFG1			$y=2.18x+0.06$	0.999	91
AFG2			$y=10.45x+0.12$	0.999	96
AFM1			$y=2.44x+0.03$	0.999	96
AFM2			$y=2.58x+0.08$	0.999	93
AFQ1			$y=0.41x-0.02$	0.999	90
AFL			$y=1.50x+0.01$	0.998	107

SSE(%) = signal suppression/enhancement (matrix calibration line slope/standard calibration line slope \*100).

**Table S3.** Limit of detection (LOD, S/N=3) and limit of quantification (LOQ, S/N = 10) calculated for AFB1, AFB2, AFG1, AFG2, AFM1, AFM2, AFQ1 and AFL in liver samples.

	AF concentration (ng/Kg)							
	AFB1	AFB2	AFG1	AFG2	AFM1	AFM2	AFQ1	AFL
LOD	8	2	17	5	17	13	24	30
LOQ	25	5	80	16	57	42	80	99

**Table S4.** Recoveries of AFB1, AFB2, AFG1, AFG2, AFM1, AFM2, AFQ1 and AFL in liver samples spiked at 2 different AFBs levels (0.1 and 1 ng/g).

Spiking level (ng/Kg)	Recovery, % (RSD, %, n=3)							
	AFB1	AFB2	AFG1	AFG2	AFM1	AFM2	AFQ1	AFL
1000	87 (7)	92 (7)	99 (9)	85 (9)	91 (9)	20 (3)	29 (8)	90 (7)
100	90 (1)	89 (2)	93 (7)	73 (2)	83 (3)	<LOD	<LOD	93 (7)

Determination of AF was performed using the optimized analytical method and quantification was performed using the standard calibration line. RSD = relative standard deviation.