

Table S1. Raw data on reproducible quality tests of extracted RNA from positive field samples.

Sample (replicate)	Source	Assay type / RT-qPCR kit															
		Stram/Quanta		Erster/ Sensi		Quanta		Quanta		AgPath		AgPath		Clara		Clara	
		Ct	B-ACT	Ct	Melt T	MIX2	B-ACT	MIX8	B-ACT	MIX 2	B-ACT	MIX 8	B-ACT	MIX 2	B-ACT	MIX 8	B-ACT
A(1)	w.b.	NA	29.1	28.35	78.36	34.16	30.56	32.71	31.33	31.54	27.01	31.11	27.84	32.71	28.99	30.87	29.34
A(1)	w.b.	NA	28.84	26.96	78.36	33.92	30.28	32.56	31.17	31.01	27.76	30.62	28.28	32.43	29.15	30.75	29.42
A(2)	w.b.	NA	28.69	26.67	78.05	33.58	30.55	33.06	32.26	31.17	27.24	30.35	28.04	31.97	29.01	30.73	29.84
A(2)	w.b.	NA	28.56	26.97	78.05	33.54	30.4	32.15	30.85	31.08	27.49	30.39	27.76	31.96	28.79	30.73	29.42
A(3)	w.b.	NA	28.82	26.18	78.35	33.16	30.93	31.58	31.98	30.66	28.1	29.57	27.89	31.74	29.63	30.04	30.59
A(3)	w.b.	NA	29.22	25.77	78.35	32.9	31.05	31.68	32.07	30.35	28.13	29.5	28.15	31.78	30.16	30.18	30.97
B(1)	w.b.	NA	30.66	29.18	78.2	35.69	31.77	35.11	33.0	33.84	29.32	33.38	32.58	34.66	30.52	32.83	32.27
B(1)	w.b.	NA	30.32	29.79	78.35	35.84	32.23	34.54	32.72	33.19	28.56	32.95	29.7	35.73	30.79	32.46	31.48
B(2)	w.b.	NA	30.53	29.63	78.36	36.58	32.61	35.52	32.7	33.91	29.33	32.62	29.64	36.6	32.57	32.69	32.18
B(2)	w.b.	NA	30.1	30.35	78.36	36.93	31.6	35.79	32.28	32.99	28.82	33.32	29.93	35.43	31.42	32.55	32.3
B(3)	w.b.	NA	30.58	28.6	78.2	34.96	32.23	33.48	33.44	35.01	32.93	32.42	30.33	34.89	31.82	32.4	31.96
B(3)	w.b.	NA	30.57	28.8	78.2	35.21	32.12	33.99	33.37	32.93	30.13	32.22	30.19	34.18	31.65	31.7	31.51
C(1)	w.b.	25.86	26.58	15.34	80.02	21.74	28.87	19.93	29.06	19.74	26.12	18.41	26.15	20.15	27.56	18.81	28.38
C(1)	w.b.	26.34	26.41	15.22	80.02	22.41	26.68	19.63	28.79	19.67	25.46	18.53	26.01	19.81	27.61	18.69	28.56
C(2)	w.b.	26.22	26.34	15.56	80.02	22.0	28.44	20.2	28.46	20.03	26.26	18.78	26.02	20.02	27.04	18.83	27.72
C(2)	w.b.	26.39	26.63	15.58	79.87	22.11	28.72	20.13	28.79	19.97	26.29	18.81	26.12	20.09	26.93	19.22	27.93
C(3)	w.b.	25.49	26.61	13.86	79.72	20.56	28.15	18.18	27.17	18.44	25.29	16.31	25.75	18.93	26.6	17.8	27.25
C(3)	w.b.	25.38	26.23	14.44	79.87	20.48	28.43	17.97	27.52	18.74	25.8	17.65	26.01	19.1	26.81	17.56	27.64
D(1)	b.coat	NA	25.85	22.44	78.05	26.48	27.75	25.02	28.17	24.11	24.97	23.47	25.43	25.17	26.6	23.55	27.65
D(1)	b.coat	NA	26.61	21.92	78.05	26.66	27.89	24.4	28.71	23.8	24.58	22.92	24.92	24.88	26.66	22.66	27.04
D(2)	b.coat	NA	26.21	21.7	78.05	26.22	27.57	24.85	28.25	24.0	24.68	23.5	25.31	24.12	25.3	23.23	26.52
D(2)	b.coat	NA	25.16	22.31	78.05	26.4	27.41	24.96	28.62	23.91	24.53	26.18	29.05	24.43	25.55	23.22	26.11
D(3)	b.coat	NA	26.07	22.31	78.05	27.03	28.27	25.71	29.17	24.38	24.82	23.42	25.21	24.93	26.07	23.53	26.94
D(3)	b.coat	NA	26.05	22.23	78.05	27.03	28.28	25.57	28.73	24.27	24.66	23.52	24.67	24.96	26.44	23.34	26.89

Stram- assay designed by Stram et al. [21]; Erster- assay designed by Erster et al.[17]; Sensi- SensiFAST SYBR® No-ROX Kit (Bioline) was used for Erster et al. assay [17]; all the last- comparative tests of Mix-2 and Mix-8 recently validated assays; Ct- cycle threshold; w.b.- whole blood;b.coat- buffy coat; NA- not amplified; MeltT- melting temperature; B -ACT- B- actin; Quanta - qScript XLT One-Step RT-qPCR ToughMix(Quantabio); AgPath- AgPath-ID™ One-Step RT-PCR Kit (Life technologies); Clara- Clara™ Probe 1-Step Mix No-ROX (PCR biosystems); Promega- GoTaq 1-Step RT-qPCR System (Promega); Takara- One Step PrimeScript™ RT-PCR Kit (Takara Bio Inc.).

Table S2a. Raw data on evaluation tests of the limit of detection (LOD) based on Log10 dilution series in water of the BEFV strains.

Stram- assay designed by Stram et al. [21]; Erster- assay designed by Erster et al.[17]; Sensi- SensiFAST SYBR® No-ROX Kit (Bioline) was used for Erster et al. assay [17]; all the last- comparative tests of Mix-2 and Mix-8 recently validated assays; Ct- cycle threshold; NA- not amplified; Tm- melting temperature; B -ACT- B- actin; Quanta - qScript XLT One-Step RT-qPCR ToughMix(Quantabio); AgPath- AgPath-ID™ One-Step RT-PCR Kit (Life technologies); Clara- Clara™ Probe 1-Step Mix No-ROX (PCR biosystems); Promega- GoTaq 1-Step RT-qPCR System (Promega); Takara- One Step PrimeScript™ RT-PCR Kit (Takara Bio Inc.). AUS-Australian strain BB7721; ISR-21- Israeli ISR-3180/1/21 strain; ISR-23- Israeli ISR-1520/23 strain.

Table S2b. Raw data on evaluation tests of the limit of detection (LOD) based on Log10 dilution series in bovine whole blood of the BEFV strains.

sample	source	RT-qPCR kit and system															
		Stram		Erster		Quanta		Quanta		AgPath		AgPath		Clara		Clara	
		Ct	b- ACT	Ct	Tm	MIX2	b- ACT	MIX8	b- ACT	MIX 2	b- ACT	MIX 8	b- ACT	MIX 2	b- ACT	MIX 8	b- ACT
AUS undel	Vero	18.93	23.85	20.94	79.67	21.3	27.27	18.93	26.67	18.71	26.2	17.28	26.3	18.66	25.36	18.77	25.09
AUS undel	Vero	18.65	22.68	20.85	79.97	20.92	26.78	18.57	26.36	18.72	26.11	17.56	26.56	20.15	25.74	17.51	26.61
AUS 10 ⁻¹	w.b.	25.1	22.44	26.83	79.67	27.22	22.64	24.89	22.78	23.64	21.09	23.47	21.89	25.35	22.37	24.67	24.12
AUS 10 ⁻¹	w.b.	25.11	22.53	27.5	79.67	27.21	22.59	24.53	22.42	23.53	21.57	23.08	21.67	25.89	22.84	24.27	23.77
AUS 10 ⁻²	w.b.	27.93	22.42	30.29	79.83	30.77	23.03	28.05	23.06	28.0	21.54	26.57	21.64	29.26	23.52	27.96	24.04
AUS 10 ⁻²	w.b.	27.98	22.43	30.38	79.68	29.56	21.65	28.31	22.73	28.39	21.75	26.42	21.87	29.59	23.04	28.2	24.37
AUS ⁻³	w.b.	31.24	21.78	36.14	82.94	34.19	22.48	30.78	22.19	30.51	21.46	29.9	21.47	32.69	22.18	30.85	23.35
AUS ⁻³	w.b.	31.13	22.05	33.17	79.51	34.62	22.33	30.15	22.62	30.82	20.53	29.66	21.37	32.54	22.49	31.09	23.75
AUS ⁻⁴	w.b.	33.56	21.62	40.18	NA	38.56	22.28	36.0	23.0	33.42	21.5	33.34	21.29	36.03	22.18	33.27	23.05
AUS ⁻⁴	w.b.	36.5	22.11	37.33	82.95	37.05	21.91	35.84	22.61	35.3	21.02	33.28	21.75	35	22.24	33.49	23.68
AUS ⁻⁵	w.b.	NA	22.43	40.23	NA	NA	22.64	36.79	23.67	NA	21.87	NA	21.82	NA	22.77	36.64	23.36
AUS ⁻⁵	w.b.	NA	22.52	40.41	NA	NA	22.56	NA	24.16	37.16	21.69	NA	21.59	NA	22.69	NA	23.19
AUS ⁻⁶	w.b.	NA	22.71	38.51	NA	NA	22.85	NA	23.11	NA	21.63	NA	21.45	NA	22.92	NA	23.49
AUS ⁻⁶	w.b.	NA	22.78	36.65	NA	NA	22.8	NA	22.0	NA	21.58	NA	22.08	NA	22.82	NA	23.65
ISR-1520/23 undel	Vero	22.5	23.1	22.13	80.12	19.87	23.75	17.38	23.48	17.66	21.55	15.52	23.3	18.87	22.93	16.93	23.01
ISR-1520/23 undel	Vero	22.6	22.96	22.09	80.12	19.39	24.03	17.43	24.62	17.54	21.77	15.44	23.62	18.33	23.39	16.24	23.58
ISR-1520/23 10 ⁻¹	w.b.	27.1	22.03	26.21	79.82	24.04	21.9	21.99	22.03	21.92	23.72	20.76	21.3	23.56	22.74	21.98	23.7
ISR-1520/23 10 ⁻¹	w.b.	27.22	22.3	26.08	79.82	26.23	21.31	22.05	24.0	22.0	23.77	20.41	21.45	23.64	22.67	21.98	23.32
ISR-1520/23 10 ⁻²	w.b.	30.59	22.41	29.69	79.83	28.01	21.86	27.36	24.83	26.32	21.19	24.14	21.76	27.35	23.0	25.42	23.95
ISR-1520/23 10 ⁻²	w.b.	30.59	22.33	30.03	79.83	32.09	22.77	24.4	21.93	26.35	21.4	24.12	21.9	27.67	22.93	25.96	23.82
ISR-1520/23 10 ⁻³	w.b.	35.21	22.92	33.73	82.51	32.2	22.77	29.33	22.48	29.58	21.83	27.52	21.97	30.94	23.14	29.22	24.06
ISR-1520/23 10 ⁻³	w.b.	34.99	22.86	32.24	82.51	32.09	22.07	31.16	24.37	29.37	21.72	27.37	21.87	31.17	22.84	29.34	23.81
ISR-1520/23 10 ⁻⁴	w.b.	37.45	22.63	39.82	NA	34.91	22.47	33.05	22.12	33.44	22.13	31.09	21.4	33.63	22.52	31.76	22.88
ISR-1520/23 10 ⁻⁴	w.b.	37.76	22.09	32.57	79.97	37.63	23.07	34.03	22.23	33.05	22.28	31.03	21.45	34.26	22.82	32.37	22.6
ISR-1520/23 10 ⁻⁵	w.b.	NA	22.49	37.23	82.52	NA	22.74	36.37	22.66	NA	21.8	35.75	22.28	34.74	22.8	36.09	23.89
ISR-1520/23 10 ⁻⁵	w.b.	NA	22.49	38.88	82.66	38.63	23.44	36.29	23.46	NA	21.46	35.62	21.61	36.67	23.28	37.07	24.05
ISR-1520/23 10 ⁻⁶	w.b.	NA	22.92	36.18	82.53	NA	24.13	NA	23.95	NA	22.12	NA	21.88	NA	23.21	NA	23.92
ISR-1520/23 10 ⁻⁶	w.b.	NA	22.53	37.03	82.53	NA	22.9	NA	22.83	NA	22.35	35.53	21.82	NA	22.9	NA	24.08
w.blood	w.b.	NA	22.22	40.03	NA	NA	22.97	NA	22.97	NA	21.55	NA	21.85	NA	23.02	NA	23.47
w.blood	w.b.	NA	21.84	37.65	82.94	NA	23.06	NA	22.28	NA	21.77	NA	21.78	NA	23.19	NA	23.94

Stram- assay designed by Stram et al. [21]; Erster- assay designed by Erster et al.[17]; Sensi- SensiFAST SYBR® No-ROX Kit (Bioline) was used for Erster et al. assay [17]; all the last- comparative tests of Mix-2 and Mix-8 recently validated assays; Ct- cycle threshold; NA- not amplified; Tm- melting temperature; B -ACT- B- actin; Quanta - qScript XLT One-Step RT-qPCR ToughMix(Quantabio); AgPath- AgPath-ID™ One-Step RT-PCR Kit (Life technologies); Clara- Clara™ Probe 1-Step Mix No-ROX (PCR biosystems). AUS-Australian strain BB7721. Vero-Vero cells; w.blood and w.b.- whole blood.

Table S3. Raw data on diagnostic sensitivity and diagnostic specificity tests positive field samples performed in duplicates.

		RT-qPCR kit and system																											
sample	source	Stram		Erster		Quanta		Quanta		AgPath		AgPath		Clara		Clara		TaKaRa		TaKaRa		Promega		Promega		b- ACT	b- ACT	b- ACT	b- ACT
		BEFV	ACT	BEFV	Tm	MIX2	ACT	MIX8	ACT	MIX2	ACT	MIX8	ACT	MIX2	ACT	MIX8	ACT	MIX2	ACT	MIX8	ACT	MIX2	ACT	MIX8	ACT				
2119/23	w. b.	34.88	18.57	26.37	80.08	22.22	20.02	20.82	20.05	24.33	18.01	21.38	18.78	26.14	20.62	23.19	21.35	26.99	19.75	25.16	19.71	26.31	22.93	24.29	24				
2119/23	w. b.	35.49	18.69	26.37	80.08	22.39	20.11	20.66	20.04	24.94	18.6	21.32	18.84	25.8	20.5	23.29	21.05	26.99	19.57	26.06	20.07	26.51	23.2	24.26	23.79				
2120/23	w. b.	NA	18.95	34.72	83.1	NA	20.11	NA	20.2	37.19	19.42	34.92	19.21	NA	20.61	35.24	21.21	39.06	19.26	40.63	20.12	NA	22.86	35.74	24.39				
2120/23	w. b.	NA	18.6	36.56	83.39	NA	20.1	36.19	20.19	NA	18.22	34.53	19.22	NA	17.89	36.09	21.64	39.06	19.33	35.01	18.86	NA	23.42	33.14	23.95				
2123/23	w. b.	25.42	18.62	NT	NT	24.15	20.67	22.93	20.64	23.17	19.25	20.08	18.94	23.25	20.58	20.93	21.67	24.63	19.18	23.1	19.23	23.74	22.68	22.15	23.92				
2123/23	w. b.	25.02	18.36	NT	NT	24.24	20.67	22.86	20.61	22.97	18.64	20.09	19.01	23.38	20.52	20.78	20.91	24.63	18.7	23.53	19.59	23.51	22.45	21.94	23.85				
2190/1/23	w. b.	NA	17.4	35.08	82.95	NA	21.87	36.36	21.98	NA	18.13	NA	19.33	37.87	19	36.42	19.97	NA	18.7	NA	18.81	NA	21.76	NA	23.06				
2190/1/23	w. b.	NA	17.43	39.5	83.25	NA	21.74	NA	21.81	NA	18.03	35.52	19.33	NA	18.93	36.38	19.92	NA	18.97	43.13	19.21	NA	21.88	39.46	22.81				
2190/2/23	w. b.	NA	18.8	34.72	82.94	NA	21.97	NA	21.97	34.17	20	37.13	19.33	37.19	20.57	NA	20.42	NA	19.21	35.82	17.07	NA	23.46	NA	23.16				
2190/2/23	w. b.	NA	17.58	37.81	83.39	NA	22.14	NA	23.38	NA	18.12	36.69	23.39	37.6	20.01	NA	19.85	NA	19.21	NA	19.47	NA	23.24	38.49	24.03				
2202/23	s+l	24.4	22.54	26.91	80.38	22.59	24.95	21.35	21.97	21.54	24.15	17.89	23.39	21.71	25.52	19.47	26.38	23.31	21.76	21.58	22.2	21.66	27.64	20.52	28.8				
2202/23	s+l	24.06	22.53	26.18	80.08	21.72	22.14	21.3	22.38	21.74	23.28	17.89	23.39	20.53	54.56	19.18	26.26	22.97	21.65	20.41	22.6	21.59	26.81	18.89	24.36				
2203/23	s+l	NA	17.78	38.98	82.94	NA	23.09	36.5	23.73	NA	23.18	34.03	23.08	34.28	21.23	32.95	21.75	NA	17.9	36.42	17.89	NA	23.66	36.34	24.21				
2203/23	s+l	NA	17.43	39.55	83.09	NA	21.71	35.39	21.98	NA	17.57	34.77	23.08	34.86	20.91	32.38	21.18	NA	18.03	37.56	18.11	NA	23.07	37.69	23.81				
2205/23	w. b.	39.92	21.89	35.68	83.1	NA	30.38	36.36	23.73	36.85	22	35.64	23.08	36.59	23.71	34.35	24.28	41.31	22.46	38.1	22.62	38.65	26.53	35.87	27.51				
2205/23	w. b.	NA	22.16	37.69	83.1	NA	30.95	NA	21.82	NA	26.19	34.03	23.08	37.27	23.74	NA	24.58	NA	22.47	39.51	22.64	NA	26.46	36.17	25.24				
2206/1/23	w. b.	36.23	18.65	33.13	82.65	32.14	22.86	36.5	22.86	36.84	20.21	34.74	19.33	35.35	21.41	34	19.6	38.03	20.08	33.83	16.83	37.5	23.83	33.05	21.98				
2206/1/23	w. b.	NA	19.75	33.42	84.58	NA	23.09	36.5	22.38	35.93	20.15	33.63	19.33	35.62	21.21	34	19.01	36.84	20.18	35.36	19.85	38.77	23.93	35	23.75				
2209/23	s+l	36.79	20.12	NT	NT	29.11	21.88	26.36	20.98	30.54	22.81	28.47	21.33	30.71	22.21	28.12	23.05	32.45	19.09	31.84	19.74	30.54	25.39	28.52	26.14				
2209/23	s+l	40.25	20.37	NT	NT	29.69	21.85	26.02	21.24	30.48	22.76	28.47	23.08	25.15	20.29	28.19	23.13	31.69	19.12	29	18.52	29.86	24.8	27.51	23.99				
2232/23	w. b.	NA	20.15	35.68	82.94	NA	23.42	38.14	23.73	37.87	20.83	38.17	19.33	37.87	21.67	34.69	22.4	38.8	20.64	39.35	20.5	NA	24.48	35.27	25.8				
2232/23	w. b.	NA	20.33	36.69	82.94	NA	25.59	36.5	21.97	31.02	17.64	35.51	19.33	36.13	21.82	35.66	22.42	NA	20.34	39.56	20.73	NA	24.4	NA	25.12				
2271/1/23	w. b.	NA	20.2	35.68	82.79	NA	19.76	NA	20.78	NA	20.3	NA	20.44	NA	20.25	NA	19.12	NA	20.91	NA	20.74	NA	22.59	NA	21.74				
2271/1/23	w. b.	NA	19.8	35.2	83.09	NA	20.53	NA	21.87	NA	20.67	NA	20.66	NA	20.17	NA	20.96	NA	20.44	NA	20.44	NA	23.67	NA	24.62				
2271/2/23	w. b.	23.34	20.52	25.65	79.94	21.96	21.87	20.82	22.97	20.76	20.67	19.64	20.66	23.19	21.02	20.74	21.67	23.5	20.91	22.56	20.28	24.29	24.62	21.93	24.62				
2271/2/23	w. b.	23.4	20.58	24.38	29.94	21.89	20.78	20.42	21.87	20.76	20.92	19.64	20.44	22.06	20.48	20.79	21.34	23.59	20.74	21.68	21.75	23.93	23.67	20.83	23.67				
2274/1/23	w. b.	21.43	18.64	23.52	79.33	21.96	20.78	18.7	20.78	18.75	18.92	17.78	19.58	20.84	19.75	18.89	20.4	20.9	19.39	20.12	20.69	21.93	22.59	19.82	22.34				
2274/1/23	w. b.	21.42	19.17	22.77	79.64	20.82	19.76	18.72	20.78	18.75	19.53	17.78	19.51	21.36	20.09	18.78	19.38	21.66	19.39	20.15	19.15	21.93	22.59	19.82	23.61				
2275/1/23	w. b.	22.46	20.46	23.52	80.09	21.89	22.97	20.42	21.87	19.92	20.67	19.49	20.44	23.67	24.33	19.71	21.54	21.82	20.28	21.66	20.91	22.76	23.67	20.83	24.54				
2275/1/23	w. b.	22.66	20.29	26.18	80.09	20.82	22.87	20.42	22.89	19.92	20.67	18.67	20.66	22.25	21.64	19.87	21.74	21.97	20.91	21.35	20.91	22.76	23.67	20.83	23.96				
80/23	w. b.	NA	17.23	39.06	83.09	NA	20.78	NA	19.76	NA	19.53	NA	19.58	NA	19.66	NA	19.52	NA	19.39	NA	19.39	NA	22.59	NA	21.69				
2280/23	w. b.	NA	18.42	34.62	82.94	NA	19.76	NA	20.78	NA	19.07	NA	19.51	NA	19.52	NA	19.92	NA	19.39	NA	NA	NA	22.93	NA	22.51				
2286/23	s.	NA	25.89	35.68	82.64	33.89	23.82	NA	27.82	37.8	26.39	36.42	26.39	NA	26.86	NA	27.1	39.73	25.44	38.88	25.44	NA	30.71	NA	30.82				
2286/23	s.	NA	25.57	36.56	82.94	NA	27.82	37.29	27.82	36.62	26.39	37.45	28.32	39.42	26.84	NA	26.34	NA	25.44	NA	25.44	NA	31.48	NA	31.63				
2250/14	b.c.	NA	27.64	29.94	82.8	30.93	30.36	30.09	29.51	29.3	27.52	28.67	28.24	30.95	28.62	30.15	28.79	31.12	27.34	32.53	27.51	31.89	32.54	30.93	31.63				

2250/14	b.c.	NA	27.84	31.76	78.43	29.77	28.42	29.91	29.51	28.79	28.36	28.67	28.24	30.98	28.66	29.99	29.01	31.12	27.34	32.53	27.25	31.89	32.54	30.65	32.46
2267/14	b.c.	NA	21.45	34.63	82.65	30.32	22.71	30.93	23.82	29.97	22.52	30.8	22.44	33.7	22.83	32.99	23.43	37.73	22.14	35.6	21.14	40.48	25.92	32.55	25.74
2267/14	b.c.	NA	22.08	31.91	82.65	30.2	21.87	30.93	23.82	30.29	22.52	30.8	22.44	33.84	22.55	32.82	22.67	NA	21.4	35.15	21.79	38.81	25.8	32.55	25.86
1747/18	b.c.	NA	20.39	NT	NT	31.81	22.89	30.09	23.82	30.29	20.42	29.41	20.44	35.16	23.7	31.4	21.77	33.17	21.4	37.73	21.36	34.06	23.67	31.89	24.54
1747/18	b.c.	NA	20.43	NT	NT	31.81	22.89	30.32	23.82	30.29	20.58	29.42	20.44	34.14	22.59	31.67	21.92	32.53	23.62	36.85	21.8	34.91	23.67	31.89	24.8
1847/5/18	b.c.	NA	26.77	34.79	78.73	30.17	24.79	30.32	26.81	29.79	22.52	28.45	22.44	33.69	24.25	30.6	24.58	32.22	23.62	36.36	23.7	32.55	25.92	30.65	26.95
1847/5/18	b.c.	NA	26.8	31.76	78.58	30.17	24.79	30.05	28.42	28.67	21.87	28.67	22.2	34.05	24.82	30.43	24.79	32.22	24.09	35.15	23.62	33.09	25.92	30.65	26.95
1958/18	b.c.	NA	19.32	20.55	78.43	21.96	20.1	18.43	19.85	17.94	17.42	17.77	18.17	21.79	21.69	18.71	20.36	21.66	19.39	21.66	20.06	21.93	21.63	20.83	22.89
1958/18	b.c.	NA	20.06	20.77	78.43	21.96	20.1	18.05	19.72	17.94	17.42	17.24	18.17	21.6	19.44	NT	NT	21.68	19.39	21.68	19.27	21.93	21.76	20.83	22.89
2218/4/23	w. b.	21.39	21.56	17.29	79.81	19.99	19.33	18.48	20.88	19.85	20.39	18.92	20.92	17.75	18.34	17.69	19.86	21.55	18.16	20.08	19.39	19.3	22.27	17.51	22.47
2218/4/23	w. b.	22.44	21.49	16.95	79.95	19.88	18.84	18.2	20.8	19.79	20.46	18.83	20.64	16.77	18.32	17.3	19.06	21.73	18.99	20.02	19.43	19.26	22.18	17.53	22.94
2206/2/23	w. b.	29.98	22.58	24.68	79.51	28.04	20.84	26.61	22.39	27.44	22.44	27.02	22.72	23.14	19.26	22.81	20.55	31.49	20.73	32.08	20.91	27.57	24.67	26.15	25.26
2206/2/23	w. b.	30.26	22.59	25.28	79.51	27.65	20.79	26.34	22.35	27.28	21.91	26.88	22.37	19.88	19.35	23.33	20.42	28.53	18.75	32.15	21.34	26.41	23.64	25.75	24.93
2210/23	w. b.	30.81	22.59	24.43	79.95	28.53	21.41	26.61	22.61	27.67	22.27	26.75	22.37	23.99	16.26	21.16	19.89	30.7	19.49	30.13	20.48	27.91	24.55	25.87	25.06
2210/23	w. b.	30.44	22.6	24.73	79.95	28.23	20.79	26.5	22.27	26.96	21.58	26.82	22.46	23.6	19.88	22.44	21.13	31.33	20.71	30.69	20.22	27.73	24.71	25.84	25.11
2213/23	w. b.	25.66	23.15	19.3	79.81	23.66	21.97	21.48	23.64	23.03	22.77	22.07	23.35	20.13	21.04	20.09	20.37	25.41	21.3	23.77	21.46	22.53	24.73	20.99	26
2213/23	w. b.	26.1	23.28	19.09	80.11	23.67	21.94	21.75	23.7	23.09	22.69	22.06	23.13	20.83	21.15	21.01	21.42	25.66	21.81	24.16	21.58	22.49	25.14	20.64	25.8
3313/1/21	b.c.	NA	28.15	14.44	77.99	21.34	26.17	19.96	29.28	20.49	27.14	19.57	27.45	17.14	24.47	17.57	26	21.93	24.58	25.7	26.8	19.6	27.77	17.67	28.94
3313/1/21	b.c.	NA	28.78	14.34	77.68	21.27	27.03	19.61	29.4	20.34	27.16	19.5	27.18	16.34	23.97	17.64	27.14	22.25	25.74	25.42	26.75	19.23	28.99	18.42	29.23
3330/21	b.c.	NA	27.73	15.55	77.99	21.3	26.39	19.37	28.56	20.7	27.32	19.42	27.38	17.82	25.16	17.92	26.06	22.82	25.6	25.19	26.52	19.71	29.93	18.53	29.55
3330/21	b.c.	NA	26.61	16.74	77.99	21.3	26.8	19.17	28.46	20.43	26.57	18.88	25.77	18.06	24.98	17.03	25.56	22.76	25.89	21	19.81	19.6	29.45	17.78	29.9
2285/2/21	b.c.	NA	28.73	22.88	77.99	22.88	27.96	20.9	29.49	21.89	27.22	20.86	27.15	16.6	25.61	20.29	26.57	23.43	24.54	25.41	25.99	21.02	30.01	19.96	30.19
2285/2/21	b.c.	NA	28.25	22.9	77.83	22.57	26.67	20.84	29.84	21.93	27.11	20.95	27.35	20.35	25.88	19.51	26.25	23.89	25.25	25.93	26.35	20.67	29.42	19.62	30.1
3368/1/21	b.c.	NA	25.93	22.83	77.98	27.22	25.26	25.81	26.94	26.43	26.17	25.34	26.26	25.9	24.94	24.72	23.81	29.25	24.75	33.21	25.39	26.15	28.41	24.72	28.89
3368/1/21	b.c.	NA	25.98	23.14	77.98	22.38	25.31	25.66	27.44	26.45	26.42	25.55	26.31	26.05	25.61	24.66	23.69	29.9	25.15	33.85	25.61	25.79	28.36	24.12	28.17
3386/21	p.	NA	25.79	25.44	77.99	32.37	24.95	30.61	24.64	31.68	26.4	28.78	24.44	30.69	23.7	27.51	22.99	35.22	23.94	29.97	18.44	31.37	29	28.26	28.67
3386/21	p.	NA	26.96	25.52	78.14	32	25.32	29.7	26.64	29.88	25.19	28.67	24.49	31.16	23.93	22.86	22.41	35.54	22.82	37.17	24.47	31.18	29.36	29.83	29.43
3386/21	b.c.	NA	27.1	22.83	77.99	29.69	26.71	27.63	28.26	29.05	27.95	27.41	27.6	24.31	24.73	25.35	25.48	32.21	26.45	35.46	26.7	28.4	30.19	27.46	30.85
3386/21	b.c.	NA	27.63	23.14	77.99	29.49	26.83	28.02	27.8	28.97	28.98	25.22	24.76	25.85	25.79	24.85	24.73	32.04	26.28	32.97	26.18	27.84	30.15	26.91	30.59
3038/3/21	b.c.	NA	30.08	16.4	78.14	23.84	28.57	22.1	30.49	23.25	28.5	21.22	28.09	20	26.91	20.17	26.81	25.3	26.24	26.93	27.19	22.21	30.75	21.42	31.19
3038/3/21	b.c.	NA	29.2	16.64	78.14	23.62	28.12	22.06	30.61	23.08	28.56	22.07	28.61	19.9	26.22	19.64	26.98	25.14	26.58	27.19	27.58	22.12	30.64	21.37	31.46
1900/18	b.c.	NA	27.97	22.55	78.29	28.82	25.85	27.37	27.68	28.18	27.13	27.42	27.25	22.32	25.2	23.43	25.62	31.08	24.65	34.25	25.62	27.66	29.67	25.91	30.01
1900/18	b.c.	NA	28.6	22.61	78.29	28.54	25.72	27.45	27.53	28.39	27.41	27.38	27.12	25.54	25.31	25.34	25.01	31.12	24.68	33.43	25.01	28.14	29.96	26.93	30.37
1934/1/18	b.c.	NA	25.25	15.24	78.14	21.97	22.99	19.56	23.74	21.34	24.03	16.76	19.25	18.91	22.29	17.76	22.59	21.8	19.74	23.61	21.42	20.42	25.81	19.3	23.98
1934/1/18	b.c.	NA	25.35	15.55	77.99	21.49	22.02	19.84	23.77	21.37	24.09	18.93	22.15	18.31	22.47	18.51	22.45	21.7	21.75	24.62	22.39	20.13	25.67	18.83	24.64
1813/11	b.c.	NA	26.61	33.34	82.92	30.94	27.42	28.08	26.91	31.94	26.42	31.27	25.99	33.06	28.34	32.39	26.73	32.83	27.49	38.13	28.43	30.15	27.83	29.09	27.79
1813/11	b.c.	NA	26.71	34.09	83	31.64	27.61	27.86	26.74	31.78	26.51	31.44	26.52	33.35	28.38	32.98	27.23	33.26	27.14	39.02	28.48	31.54	28.01	28.86	27.91

2068/1/14	b.c.	NA	25.74	33.85	82.93	31.78	26.37	30.69	26.89	31.71	25.84	31.49	26.03	32.29	26.92	32.84	25.43	30.63	25.41	39.35	26.38	31.09	28.1	30.89	26.36
2068/1/14	b.c.	NA	26.63	34.15	82.64	31.78	26.63	29.57	26.84	31.88	25.61	31.09	24.8	32.9	26.97	32.61	25.13	28.58	24.57	38.32	25.93	30.96	27.8	30.44	26.6
2068/2/14	b.c.	NA	28.93	37.37	82.42	30.53	31.33	27.16	30.24	29.57	28.22	28.8	27.97	30.96	29.82	28.34	28.03	30.9	27.14	32.75	29.46	28.19	28.86	27.41	29.56
2068/2/14	b.c.	NA	29.04	35	82.48	30.03	29.89	26.9	29.6	27.81	27.14	28.17	28.09	30.59	29.76	28.44	27.73	30.69	27.96	31.9	29.27	29.03	29.08	27.66	28.6
2068/3/14	b.c.	NA	23.78	NA	82.9	27.94	24.96	25.89	24.04	27.14	22.87	27.76	22.89	28.03	24.93	28.73	23.73	27.8	22.38	33.52	23.65	26.52	24.13	24.98	23.37
2068/3/14	b.c.	NA	23.94	36.47	78.01	27.22	24.06	27.09	25.77	27.59	23.95	28.19	23.82	27.74	24.3	28.84	24.14	28.46	22.61	32.78	23.55	24.05	25.17	24.92	22.81
2078/1/14	b.c.	NA	22.02	24.9	78.03	18.85	21.01	22.34	22.46	20.97	20.71	23.11	20.25	21.81	22.91	23.65	21.09	19.63	20.92	27.55	21.94	20.56	23.4	22.36	20.86
2078/1/14	b.c.	NA	22.04	25.8	78.03	20.4	21.46	21.43	22.19	21	20.27	24.43	20.55	22.01	22.74	23.5	20.95	21.03	20.89	27.85	21.89	20.71	23.29	22.39	20.9
2078/3/14	b.c.	NA	25.41	30.86	78.18	27.88	27.05	22.37	25.73	26.68	24.31	24.43	23.3	27.2	25.87	25.91	23.96	26.87	24.21	30.02	25.14	20.64	26.29	23.56	23.9
2078/3/14	b.c.	NA	25.47	30.22	78.18	25.96	26.65	24.47	26.16	26.73	24.01	25.07	23.44	27.24	25.67	25.75	24.6	27.13	24.19	30.08	25.24	25.53	26.76	NA	NA
1631/11	b.c.	NA	28.47	32.87	82.92	31.72	29.4	27.9	28.78	31.56	27.47	30.19	27.21	32.67	28.47	31.31	26.73	34.98	30.46	35.44	30.44	31.21	29.64	31.05	30.15
1631/11	b.c.	NA	28.2	31.81	83.21	31.69	29.67	27.13	28.52	31.39	27.75	30.31	27.71	32.54	28.5	30.81	26.72	35.33	30.78	35.33	31.45	31.31	29.28	30.5	27.94
2073/13	b.c.	NA	27.81	34.39	82.48	26.67	30.85	26.98	30.36	28.89	29.26	26.76	28.71	27.49	28.41	28.84	28.34	31.28	30.13	32.47	30.39	26.73	31.1	25.27	29.28
2073/13	b.c.	NA	28.78	32.42	82.92	26.61	31.01	26	29.71	28.5	28.9	27.61	29.86	27.29	29.54	28.64	28.09	31.46	30.36	32.09	30.43	26.25	30.16	25.08	27.98

Stram- assay designed by Stram et al. [21]; Erster- assay designed by Erster et al.[17]; Sensi- SensiFAST SYBR® No-ROX Kit (Bioline) was used for Erster et al. assay [17]; all the last- comparative tests of Mix-2 and Mix-8 recently validated assays; Ct- cycle threshold; w.b.- whole blood; b.c.- buffy coat; P.- plasma; s.- spleen; s+l- mix of spleen and lung; NA- not amplified; b -ACT- B- actin; Quanta - qScript XLT One-Step RT-qPCR ToughMix(Quantabio); AgPath- AgPath-ID™ One-Step RT-PCR Kit (Life technologies); Clara- Clara™ Probe 1-Step Mix No-ROX (PCR biosystems); Promega- GoTaq 1-Step RT-qPCR System (Promega); Takara- One Step PrimeScript™ RT-PCR Kit (Takara Bio Inc.); Tm- melting temperature.

Table S4. Raw data on diagnostic sensitivity and diagnostic specificity test performed with field samples in one plicate.

		RT-qPCR kit and system															
sample	source	Stram		Erster		Quanta		Quanta		AgPath		AgPath		Clara		Clara	
		Ct	b-ACT	Ct	Melt T	MIX2	b-ACT	MIX8	b-ACT	MIX 2	b-ACT	MIX 8	b-ACT	MIX 2	b-ACT	MIX 8	b-ACT
1293/1/24	w.b.	NA	22.37	36.01	82.0	NA	21.4	NA	23.23	NA	22.94	NA	23.22	NA	23.39	NA	23.85
1293/2/24	w.b.	NA	23.31	35.31	82.0	NA	21.13	NA	22.64	NA	22.86	NA	23.44	NA	23.76	NA	23.88
1293/3/24	w.b.	NA	23.47	37.96	82.0	NA	22.8	NA	21.69	NA	23.52	NA	24.72	NA	24.38	NA	24.46
1294/24	w.b.	NA	22.21	NA	NA	NA	21.97	NA	22.68	NA	22.99	NA	23.36	NA	23.9	NA	24.42
1295/1/24	w.b.	NA	21.51	35.16	82.0	NA	20.43	NA	21.31	NA	21.78	NA	21.8	NA	22.69	NA	22.85
1295/2/24	w.b.	NA	21.53	35.02	82.0	NA	20.49	NA	20.93	NA	22.04	NA	22.2	NA	22.65	NA	23.15
1295/3/24	w.b.	NA	21.03	NA	NA	NA	19.86	NA	21.33	NA	22.06	NA	22.03	NA	22.85	NA	22.34
1295/4/24	w.b.	NA	22.2	40.62	NA	NA	22.87	NA	23.85	NA	23.86	NA	24.17	NA	23.67	NA	24.8
1295/5/24	w.b.	NA	21.57	33.89	82.0	NA	20.54	NA	22.08	NA	23.35	NA	22.85	NA	23.44	NA	23.68
1295/6/24	w.b.	NA	20.81	NA	NA	NA	20.81	NA	21.21	NA	21.9	NA	22.28	NA	22.41	NA	23.01
1295/7/24	w.b.	NA	23.59	39.23	NA	NA	22.17	NA	22.12	NA	23.52	NA	23.6	NA	24.98	NA	24.15
1295/8/24	w.b.	NA	20.9	NA	NA	NA	20.31	NA	20.56	NA	21.3	NA	21.53	NA	22.29	NA	22.42
1295/9/24	w.b.	NA	22.3	36.7	NA	NA	21.83	NA	22.14	NA	22.08	NA	22.23	NA	23.33	NA	23.15
1295/10/24	w.b.	NA	20.62	37.75	82.53	NA	20.03	NA	20	NA	20.79	NA	21.69	NA	21.46	NA	21.88
1295/11/24	w.b.	NA	21.51	40.54	NA	NA	20.54	NA	20.43	NA	21.54	NA	20.97	NA	21.79	NA	21.51
1295/12/24	w.b.	NA	19.18	36.62	82.22	NA	19.58	NA	20.2	NA	20.26	NA	20.24	NA	22.2	NA	20.94
1299/1/24	w.b.	NA	18.42	38.53	NA	NA	17.16	NA	17.44	NA	15.54	NA	15.42	NA	19.02	NA	20.18
1299/2/24	w.b.	NA	17.74	36.75	NA	NA	17.18	NA	16.54	NA	15.39	NA	16.38	NA	17.87	NA	19.46
1299/3/24	w.b.	NA	19.79	34.67	82.0	NA	17.19	NA	17.74	NA	16.61	NA	17.49	NA	17.71	NA	19.64
1299/5/24	w.b.	NA	17.84	41.14	NA	NA	16.99	NA	17.59	NA	16.39	NA	17.18	NA	18.68	NA	19.39
1311/1/24	w.b.	NA	20.87	39.04	82.41	NA	17.12	NA	17.48	NA	18.98	NA	19.94	NA	21.41	NA	22.72
1311/2/24	w.b.	NA	20.3	36.71	82.56	NA	20.44	NA	20.97	NA	18.06	NA	19.14	NA	19.8	NA	21.12
1312/24	w.b.	NA	19.53	39.06	NA	NA	19.71	NA	20.72	NA	17.13	NA	17.9	NA	18.82	NA	19.84
1318/24	w.b.	NA	19.79	NA	NA	NA	18.45	NA	18.96	NA	15.45	NA	19.94	NA	19.29	NA	20.1
1320/1/24	w.b.	NA	21.79	38.74	NA	NA	19.93	NA	20.85	NA	19.01	NA	20.34	NA	20.78	NA	21.65
1320/2/24	w.b.	NA	19.2	NA	NA	NA	18.74	NA	19.63	NA	17.13	NA	18.42	NA	19.32	NA	20.16
1320/3/24	w.b.	NA	20.77	NA	NA	NA	19.14	NA	19.75	NA	17.42	NA	18.66	NA	19.85	NA	20.23
1320/4/24	w.b.	NA	20.33	NA	NA	NA	18.68	NA	19.08	NA	18.22	NA	18.42	NA	20.37	NA	21.19
1322/24	s.	NA	25.95	NA	NA	NA	24.84	NA	25.2	NA	23.22	NA	24.05	NA	23.69	NA	24.88
1326/24	w.b.	NA	20.87	NA	NA	NA	20.98	NA	21.15	NA	18.71	NA	21.29	NA	19.9	NA	20.67
1327/24	w.b.	NA	18.97	NA	NA	NA	18.46	NA	18.64	NA	16.45	NA	16.9	NA	17.25	NA	17.63
1330/1/24	w.b.	NA	21.93	NA	NA	NA	21.17	NA	20.49	NA	18.7	NA	19.46	NA	19.89	NA	20.73
1330/2/24	w.b.	NA	18.45	NA	NA	NA	18.01	NA	17.53	NA	15.68	NA	16.56	NA	16.82	NA	17.96

1324/24	s.	NA	20.95	38.18	NA	NA	23.32	NA	23.37	NA	21.18	NA	22.28	NA	21.18	NA	21.76
1315/24n	w.b.	NA	22.97	40.65	NA	NA	22.89	NA	22.21	NA	19.9	NA	20.65	NA	21.02	NA	21.33
1338/24	w.b.	NA	20.54	NA	NA	NA	21.41	NA	21.33	NA	22.35	NA	23.21	NA	19.48	NA	19.64
1339/24	w.b.	NA	20.87	NA	NA	NA	22.06	NA	22.07	NA	23.64	NA	24.93	NA	20.62	NA	21.13
1340/23	s.	NA	30.67	NA	NA	NA	30.23	NA	30.25	NA	28.18	NA	28.93	NA	28.96	NA	29.82
1341/24	s+l	NA	22.96	NA	NA	NA	23.57	NA	24.04	NA	21.23	NA	21.73	NA	21.72	NA	22.29
1347/1/24	w.b.	NA	21.21	NA	NA	NA	22.08	NA	21.96	NA	18.63	NA	20.49	NA	22.18	NA	23.03
1347/2/24	w.b.	NA	22.11	40.23	NA	NA	23.12	NA	23.07	NA	20.29	NA	21.12	NA	23.15	NA	23.67
1347/3/24	w.b.	NA	21.58	38.37	82.0	NA	22.18	NA	22.93	NA	19.7	NA	20.68	NA	22.11	NA	23.01
1347/4/24	w.b.	NA	20.2	NA	NA	NA	20.35	NA	20.42	NA	16.65	NA	19.84	NA	21.26	NA	21.69
1347/5/24	w.b.	NA	22.22	NA	NA	NA	23.07	NA	20.31	NA	18.84	NA	21.38	NA	22.48	NA	23.38
1347/6/24	w.b.	NA	22.13	NA	NA	NA	23.33	NA	21.7	NA	20.5	NA	21.04	NA	22.54	NA	23.28
1347/7/24	w.b.	NA	22.67	NA	NA	NA	23.59	NA	23.15	NA	20.11	NA	21.64	NA	22.58	NA	23.43
1347/8/24	w.b.	NA	21.91	36.54	82.5	NA	22.75	NA	21.9	NA	19.21	NA	20.6	NA	22.33	NA	22.53
1347/9/24	w.b.	NA	18.38	35.33	75.29	NA	21.43	NA	20.24	NA	18.44	NA	19.5	NA	20.99	NA	21.45
1347/10/24	w.b.	NA	20.23	NA	NA	NA	21.66	NA	20.95	NA	18.7	NA	19.9	NA	21.48	NA	21.86
1347/11/24	w.b.	NA	19.99	NA	NA	NA	22.13	NA	21.56	NA	19.53	NA	20.13	NA	22.11	NA	22.42
1354/24	w.b.	NA	22.64	NA	NA	NA	22.35	NA	22.06	NA	20.54	NA	21.82	NA	23.14	NA	23.33
1355/1/24	w.b.	NA	23.47	NA	NA	NA	22.8	NA	23.13	NA	22.51	NA	22.58	NA	22.08	NA	23.33
1355/2/24	w.b.	NA	22.86	NA	NA	NA	20.89	NA	22.39	NA	20.95	NA	21.92	NA	22.16	NA	22.46
1355/3/24	w.b.	NA	21.57	40.1	84.3	NA	20.67	NA	21.66	NA	20.19	NA	20.68	NA	20.56	NA	21.07
1356/1/24	w.b.	NA	21.73	37.5	82.35	NA	20.27	NA	21.08	NA	19.84	NA	21.14	NA	20.88	NA	21.11
1356/2/24	w.b.	NA	21.94	37.52	82.35	NA	21.03	NA	21.23	NA	20.31	NA	20.94	NA	21.09	NA	21.23
1356/3/24	w.b.	NA	23.38	39.83	84.31	NA	21.9	NA	22.95	NA	20.97	NA	22.07	NA	22.04	NA	22.61
1356/4/24	w.b.	NA	22.46	NA	NA	NA	20.36	NA	21.75	NA	20.91	NA	21.41	NA	20.89	NA	21.93
1356/5/24	w.b.	NA	23.18	NA	NA	NA	22.6	NA	22.69	NA	21.2	NA	21.01	NA	21.78	NA	22.17
1365/24	w.b.	NA	19.95	34.63	NA	NA	17.33	NA	17.04	NA	21.79	NA	21.47	NA	17.91	NA	18.89
1366/1/24	w.b.	NA	19.84	36.15	80.77	NA	18.11	NA	18.54	NA	17.71	NA	17.7	NA	19.4	NA	20.17
1366/2/24	w.b.	NA	19.09	34.82	83.46	NA	18.33	NA	18.02	NA	17.14	NA	16.68	NA	18.55	NA	18.74
1367/24	s.	NA	21.87	NA	NA	NA	23.41	NA	23.25	NA	19.46	NA	20.49	NA	21.3	NA	21.24
1378/24	w.b.	NA	21.38	37.18	82.62	NA	20.72	NA	21.45	NA	18.12	NA	19.24	NA	18.94	NA	19.77
147/24	s+l	NA	29.73	39.22	74.06	NA	29.21	NA	30.55	NA	27.1	NA	28.12	NA	25.71	NA	25.07
147/24	brain	NA	18.95	34.76	82.0	NA	30.43	NA	30.37	NA	26.46	NA	26.61	NA	28.59	NA	29.5
1352/23	serum	NA	26.59	NA	NA	NA	27.08	NA	27.68	NA	25.36	NA	25.52	NA	26.71	NA	25.93
1373/23	serum	NA	18.9	35.32	83.8	NA	18.46	NA	20.08	NA	17.29	NA	17.1	NA	18.59	NA	18.43
1369/23	s.	NA	26.03	NA	NA	NA	25.3	NA	25.6	NA	21.99	NA	22.87	NA	24.26	NA	24.82
1373/23	serum	NA	28.23	NA	NA	NA	26.71	NA	25.98	NA	22.67	NA	23.7	NA	25.9	NA	25.63

1420/23	brain	NA	28.23	NA	NA	NA	29.6	NA	29.85	NA	28.54	NA	28.83	NA	28.94	NA	29.7
1474/23	s.	NA	28.48	41.66	NA	NA	30.49	NA	30.57	NA	27.72	NA	28.29	NA	21.72	NA	27.37
1478/2/23	w.b.	NA	22.93	NA	NA	NA	23.21	NA	23.3	NA	21.16	NA	21.99	NA	19.74	NA	21.45
1478/3/23	w.b.	NA	22.63	39.6	NA	NA	22.62	NA	21.7	NA	20.67	NA	21.24	NA	19.78	NA	20.75
1620/23	w.b.	NA	20.52	38.88	NA	NA	22.17	NA	23.01	NA	19.72	NA	20.08	NA	20.18	NA	20.64
1620/23	serum	NA	35.01	39.63	NA	NA	37.49	NA	36.98	NA	NA	NA	34.59	NA	32.45	NA	35.29
1480/2/23	w.b.	NA	19.31	36.75	NA	NA	18.61	NA	19.43	NA	17.22	NA	17.71	NA	19.73	NA	20.08
1482/1/23	w.b.	NA	20.06	41.95	NA	NA	22.81	NA	23.12	NA	20.9	NA	21.17	NA	21.48	NA	22.03
1482/2/23	w.b.	NA	22.48	35.75	82.0	36.18	20.67	33.44	19.1	33.91	17.68	35.67	19.57	38.01	17.97	36.71	17.94
1482/4/23	w.b.	NA	24.9	35.22	82.35	NA	23.2	NA	23.13	NA	22.99	NA	23.32	NA	25.36	NA	25.67
1336/23	w.b.	NA	20.81	35.75	NA	NA	19.11	NA	20.65	NA	16.77	NA	17.72	NA	19.88	NA	20.32
1339/1/23	w.b.	NA	19.9	39.11	82.76	NA	19.85	NA	21.21	NA	18.61	NA	19.28	NA	19.58	NA	20.85
1350/1/23	w.b.	NA	21.62	35.59	82.31	NA	19.99	NA	19.61	NA	19.68	NA	19.59	NA	20.88	NA	22.35
2241/1/23	w.b.	35.22	20.28	41.13	NA	32.89	21.43	30.47	21.1	30.82	20.55	30.33	22.19	33.45	20.91	30.61	20.45
2241/2/23	w.b.	35.95	22.06	38.48	82.44	33.03	23.15	31.35	23.28	31.75	21.99	30.41	23.04	32.4	21.46	32.72	23.44
2045/23	brain	NA	26.94	40.77	NA	37.68	29.22	34.9	29.06	34.52	26.22	33.55	27.62	36.64	29.26	36.86	29.8
3239/09	b.c.	NA	27.28	NA	81.78	31.17	26.43	29.61	26.79	30.34	28.07	28.14	28.51	33.06	29.1	29.47	28.8
3183/09	b.c.	NA	28.64	41.52	NA	NA	27.33	NA	28.2	NA	25.94	NA	26.35	NA	28.87	NA	29.51
3170/09	b.c.	NA	24.8	36.92	82.0	NA	23.24	NA	23.76	NA	22.15	NA	22.49	NA	25.11	NA	26.89
3135/2/09	b.c.	NA	31.36	40.76	82.71	NA	30.9	NA	31.55	NA	31.41	NA	30.92	NA	31.23	NA	30.86
3136/09	b.c.	NA	29.3	NA	NA	NA	26.92	NA	29.09	NA	29.38	NA	27.4	NA	27.88	NA	28.43
3378/09	b.c.	NA	31.5	36.65	82.74	NA	31.76	NA	32.14	NA	29.73	NA	29.81	NA	28.59	NA	29.5
3100/1/09	b.c.	NA	31.54	36.88	83.05	NA	33.24	NA	33.77	NA	29.19	NA	29.99	NA	29.62	NA	31.08
3153/09	b.c.	NA	26.5	38.8	82.41	NA	25.62	NA	25.38	NA	25.37	NA	25.7	NA	23.08	NA	20.65
3165/09	b.c.	NA	30.31	38.7	82.87	NA	28.04	NA	28.91	NA	28.22	NA	28.85	NA	25.25	NA	26.2
1608/5/15	b.c.	NA	30.57	36.62	82.71	NA	29.71	NA	30.26	NA	27.9	NA	27.79	NA	29.67	NA	30.91
2070/14	b.c.	NA	31.55	NA	NA	30.26	28.54	28.69	29.94	30.23	28.68	28.95	29.16	31.95	29.99	29.0	28.6
2076/14	b.c.	NA	26.25	37.52	82.4	NA	22.83	NA	23.46	NA	23.04	NA	23.05	NA	23.75	NA	23.51
2188/1/18	b.c.	NA	31.01	34.64	82.55	NA	32.84	NA	30.28	38.69	32.21	NA	32.45	NA	30.39	35.37	29.28
3268/09	b.c.	NA	24.3	27.85	78.96	27.15	23.95	26.4	24.31	26.56	24.21	24.26	23.83	27.72	24.89	26.21	24.86
3182/09	b.c.	NA	31.94	28.68	77.98	30.31	31.91	27.33	31.55	25.86	31.64	24.26	32.67	27.6	30.11	26.05	31.78
3184/09	b.c.	NA	26.19	25.91	77.83	28.54	25.53	26.45	25.88	25.98	23.81	22.67	24.23	31.7	27.12	27.06	27.76
2973/09	b.c.	NA	28.6	25.68	77.85	28.17	28.54	25.41	28.68	26.37	27.75	23.79	28.46	28.34	29.68	26.1	29.4
2969/09	b.c.	NA	29.25	27.21	77.85	29.57	28.66	27.28	28.52	27.32	27.75	27.2	29.11	30.02	29.7	25.53	30.48
3030/2/09	b.c.	NA	24.58	22.91	77.7	25.11	24.25	23.19	24.39	23.53	23.01	21.4	24.19	26.02	25.12	22	25.82
3030/3/09	b.c.	NA	25.45	22.91	77.7	25.54	25.06	22.79	25.19	23.64	24.45	22.6	25.0	25.69	26.01	22.42	27
3081/09	b.c.	NA	31.14	27.58	77.67	30.07	31.77	31.39	33.3	27.67	29.82	27.48	31.49	29.61	31.83	27.44	32.61

3094/09	b.c.	NA	26.53	26.87	77.67	29.29	26.25	27.52	26.19	27.92	24.97	25.68	25.71	29.17	27.22	27.72	28.13
3180/09	b.c.	NA	25.37	22.07	77.7	25.64	24.76	23.86	24.99	23.61	22.02	21.43	22.88	24.91	25.76	22.47	26.63
3171/09	b.c.	NA	28.34	28.59	77.7	30.83	28.35	28.76	29.55	28.67	26.35	24.21	26.95	25.87	28.63	26.54	29.84
3173/1/09	b.c.	NA	36.18	28.56	77.67	28.96	24.84	27.5	26.46	27.95	23.94	25.82	24.05	28.93	26.33	26.18	27.2
3173/2/09	b.c.	NA	27.25	28.95	77.82	30.19	26.62	28.17	27.45	28.13	24.72	26.87	25.61	26.33	26.77	26.98	28.52
3340/09	b.c.	NA	28.38	26.52	77.91	26.36	27.5	28.95	27.39	27.19	25.28	25.57	26.26	29.84	28.57	24.37	28.8
1315/24	w.b.	NA	21.61	32.89	82.42	31.61	18.13	34.84	21.54	34.6	19.43	33.7	20.69	35.9	21.23	33.52	22.28
3164/09	b.c.	NA	24.69	28.28	77.96	29.41	23.94	28.01	24.59	29.38	23.5	27.64	23.77	30.39	23.98	28.56	23.56
3170/09	b.c.	NA	14.93	23.35	77.65	25.95	25.62	25.0	25.91	26.13	25.28	24.96	25.7	26.17	23.17	25.28	24.3
3138/09	b.c.	NA	25.9	21.53	77.97	26.97	26.44	23.89	26.86	24.95	23.49	22.44	23.48	27.4	25.96	24.81	26.93
3393/09	b.c.	NA	29.29	29.71	77.97	35.0	29.49	32.04	30.14	31.6	25.29	30.59	26.13	35.91	28.4	33.43	29.08
1957/18	b.c.	NA	21.66	25.89	78.15	31.08	22.51	27.59	22.73	29.11	20.39	27.6	19.95	29.15	21.72	31.83	21.89
1966/1/18	b.c.	NA	29.75	21.81	77.99	26.39	30.05	24.72	30.42	24.58	27.26	24.16	28.21	24.96	29.95	26.58	28.8
2126/18	b.c.	NA	26.16	21.42	77.99	25.26	26.61	25.15	27.67	23.56	24.15	22.22	24.35	24.85	26.25	25.37	25.57
2240/18	b.c.	NA	28.48	29.48	78.14/82.0	32.46	29.91	31.2	30.11	29.16	25.94	29.25	26.92	30.81	28.52	32.9	28.75
2231/18	b.c.	NA	29.26	25.32	78.14	28.78	30.81	26.5	31.53	24.46	24.86	24.0	26.8	28.75	29.2	26.7	29.73
2234/1/18	b.c.	NA	29.66	31.67	78.14/82.0	35.04	30.39	32.31	30.54	31.23	25.81	30.36	26.8	34.84	28.58	32.18	29.03
2234/2/18	b.c.	NA	23.11	21.63	77.99	25.49	23.83	23.16	23.9	22.04	19.21	20.79	19.88	25.95	23.58	23.41	23.46
2112/18	b.c.	NA	26.07	26.86	77.96	31.42	26.14	31.11	27.47	29.15	23.62	28.96	23.65	32.19	27.47	31.77	29.13
2056/2/18	b.c.	NA	31.04	29.82	77.96	34.77	32.52	32.22	33.33	31.5	28.56	29.58	29.34	34.63	32.58	31.71	31.93
2081/18	b.c.	NA	23.93	25.72	77.97	30.33	24.16	30.15	24.48	27.84	20.82	28.0	20.71	30.32	24.77	30.64	26.63
2089/18	b.c.	NA	26.83	22.66	77.97	27.72	26.37	25.82	26.21	26.52	25.47	24.03	25.02	28.26	27.45	25.02	27.63
2127/1/18	b.c.	NA	20.01	17.33	78.12	14.26	14.05	19.62	18.54	19.81	18.68	19.04	19.35	22.69	21.24	19.84	21.23
2127/2/18	b.c.	NA	22.18	30.42	78.12	33.83	21.67	33.7	21.48	32.06	20.59	32.31	20.87	34.14	23.42	33.1	23.35
2127/3/18	b.c.	NA	22.13	24.06	77.96	27.76	21.75	27.26	21.75	26.29	20.61	26.3	21.06	28.35	23.18	27.9	23.89
2093/2/18	b.c.	NA	25.41	20.1	77.96	25.59	25.21	23.47	23.55	23.56	23.52	22.92	24.27	26.26	26.73	23.63	26.87
2075/14	b.c.	NA	26.3	30.6	77.8	26.75	27.19	25.66	28.51	24.56	24.06	23.22	24.66	27.5	28.6	24.62	28.18
2074/14	b.c.	NA	23.23	24.38	77.96	32.75	31.46	24.91	24.43	20.77	20.65	21.91	21.52	23.99	24.44	23.11	24.91
2186/18	b.c.	NA	27.4	20.61	78.25	23.97	27.99	22.28	27.83	21.56	27.48	21.23	29.14	22.57	28.58	21.87	29.38
2139/18	s.	NA	28.24	26.73	78.39	28.8	27.42	27.2	26.7	27.84	27.88	26.73	28.77	28.39	28.75	26.58	29.1
2143/18	b.c.	NA	23.29	25.32	78.39	27.24	25.32	25.11	22.99	25.23	22.58	24.3	22.78	25.59	22.85	24.66	23.43
1942/1/18	b.c.	NA	26.34	20.85	78.53	26.27	27.58	24.23	26.23	23.89	25.86	23.96	26.86	24.81	26.51	22.81	27.13
3132/18	b.c.	NA	23.09	19.08	78.4	21.7	19.79	21.52	20.99	21.17	19.23	21.71	20.13	22.39	19.58	21.98	19.54
3133/18	b.c.	NA	28.16	31.73	78/82.56	37.53	26.4	35.94	27.02	35.03	25.37	35.47	25.35	38.54	27.15	35.8	25.13
2156/18	b.c.	NA	26.12	19.93	78.09	24.76	24.19	18.39	23.87	24.38	23.25	22.67	23.88	25.22	23.94	23.16	24.52
2167/18	b.c.	NA	27.16	19.76	78.09	23.32	26.17	17.7	23.82	21.52	23.52	20.8	24.16	22.97	25.01	22.1	25.81
2197/2/18	b.c.	NA	29.3	29.81	77.54	31.81	29.31	30.17	28.74	31.75	28.87	30.96	29.88	31.83	26.94	30.31	25.55

2188/2/18	b.c.	NA	28.44	31.38	77.94	31.61	26.9	29.2	27.29	32.51	27.97	30.46	28.26	31.71	24.79	29.93	25.29
2198/18	b.c.	NA	30.54	28.73	78.24	30.11	31.91	25.37	29.86	30.01	31.14	28.81	31.09	30.12	29.79	28.55	28.37
2129/18	b.c.	NA	25.18	17.79	78.27	24.83	26.0	23.59	26.58	23.88	24.82	22.96	24.55	24.37	24.88	23.57	25.13
2132/1/18	b.c.	NA	17.02	19.33	78.27	24.4	22.65	23.8	22.84	23.13	21.14	23.36	21.42	25.17	22.47	24.41	21.92
2155/18	b.c.	NA	24.84	18.45	78.41	24.16	24.62	22.15	25.1	24.49	25.77	23.35	25.95	24.73	25.13	22.39	22.66
2207/18	b.c.	NA	25.09	20.86	78.56	23.95	25.75	22.71	26.11	24.41	26.38	23.6	26.71	24.07	24.14	23.33	21.6
2208/18	b.c.	NA	23.17	20.25	78.26	21.91	22.08	22.81	23.35	23.83	24.76	22.46	25.32	24.05	21.71	22.58	23.42
2209/18	b.c.	NA	20.82	17.15	78.26	20.45	22.51	20.14	23.55	19.9	22.24	19.46	23.09	20.44	19.31	19.22	20.38
2220/18	b.c.	NA	24.16	24.78	78.43	26.64	24.26	26.15	23.9	28.48	24.51	26.1	24.1	28.86	23.13	26.68	23.01
2228/1/18	b.c.	NA	26.02	20.41	78.43	23.74	25.8	22.39	26.68	22.72	25.75	20.67	23.97	24.86	26.26	23.07	26.11
2228/2/18	b.c.	NA	27.69	20.5	78.23	24.3	27.24	22.38	28.29	22.92	26.21	20.57	25.0	24.94	30.38	22.94	28.49
2245/18	b.c.	NA	24.3	17.41	78.27	20.18	24.22	18.58	25.14	19.51	23.49	18.63	24.19	21.04	24.68	18.96	24.92
2243/18	b.c.	NA	23.37	20.23	77.96	21.94	23.84	21.94	23.18	21.07	23.26	19.75	23.12	22.37	24.18	21.15	23.9
1966/4/18	b.c.	NA	28.2	28.24	78.41	30.0	25.14	30.0	27.97	31.93	26.31	30.39	26.29	32.95	27.46	31.72	27.21
2497/14	b.c.	NA	31.91	33.36	78/82.46	29.9	26.79	29.9	31.63	36.13	30.92	34.08	30.47	36.41	32.51	34.45	31.68
1609/15	b.c.	NA	30.77	29.48	78.09	32.81	27.56	26.56	23.97	32.64	27.55	30.92	27.9	34.19	29.39	31.35	29.22
1614/15	b.c.	NA	30.1	23.93	78.09	27.38	26.81	25.47	26.08	25.59	26.27	24.98	26.24	28.54	28.26	26.09	29.32
1635/15	b.c.	NA	27.68	28.85	78.38	30.53	25.78	29.02	24.77	28.72	23.53	28.3	23.86	31.43	25.89	30.46	26.48
3442/21	w.b.	NA	21.45	14.84	78.38	18.2	21.39	17.66	22.73	16.68	21.59	15.85	22.28	17.92	21.36	16.19	22.44
3405/2/21	w.b.	NA	22.29	17.34	77.94	22.55	24.16	20.62	23.14	19.57	22.3	18.82	23.18	20.23	22.42	19.35	23.22
3050/2/21	w.b.	NA	16.89	16.91	78.24	20.78	20.75	20.35	22.34	19.66	19.08	18.46	19.56	21.14	20.45	19.36	21.31
3427/1/21	w.b.	NA	21.94	21.68	78.25	24.37	17.89	23.94	19.33	24.16	20.48	22.36	19.92	24.46	20.78	24.81	22.16
3427/2/21	w.b.	NA	22.26	22.99	78.25	27.29	21.55	24.54	21.35	25.53	21.2	24.6	21.16	26.0	21.06	25.48	21.6
3427/3/21	w.b.	NA	21.44	25.0	78.39	28.82	21.31	28.11	21.42	27.32	19.69	26.6	20.4	28.23	19.85	26.76	20.63
3433/1/21	w.b.	NA	21.84	16.6	78.09	20.91	21.16	18.74	20.79	NT	NT	NT	NT	20.68	19.94	19.95	21.77
3435/21	w.b.	NA	21.61	21.81	77.64	25.47	20.68	23.38	20.34	25.46	20.75	23.97	21.49	25.77	18.77	24.12	20.61
3436/21	w.b.	NA	25.43	28.55	78.09	31.87	23.89	28.6	23.29	32.36	24.16	31.16	24.63	32.69	23.43	31.69	24.21
3438/21	w.b.	NA	20.37	15.66	78.1	20.64	23.87	17.97	22.74	20.07	24.07	18.53	24.27	19.17	21.32	17.78	22.71
3440/21	w.b.	NA	21.58	18.5	78.13	21.74	21.81	18.06	20.19	21.53	22.34	18.86	21.87	21.64	20.6	19.79	21.08
1381/23	w.b.	34.76	19.76	31.41	79.16	34.35	19.42	33.18	20.02	32.95	17.55	33.36	18.9	36.82	18.67	34.17	19.66
1449/23	w.b.	24.68	23.3	18.21	79.62	19.75	22.78	17.87	22.72	18.49	21.57	16.31	22.35	18.69	22.65	17.46	23.47
1451/23	w.b.	24.55	22.49	17.8	79.33	18.8	22.13	18.18	22.07	18.42	21.78	17.37	22.69	20.17	23.24	17.43	22.93
1452/23	w.b.	27.18	21.27	22.28	79.33	22.93	20.63	20.74	20.55	21.52	20.23	19.87	20.69	21.73	20.97	20.78	21.51
1466/23	w.b.	23.52	19.62	18.68	79.29	17.97	19.03	17.03	19.55	18.47	18.9	15.33	19.37	20.09	20.54	16.93	20.26
2032/23	serum	32.54	30.31	25.04	79.44	28.65	30.39	25.78	29.74	27.31	29.92	23.39	29.37	26.7	29.03	25.52	30.82
1408/23	w.b.	22.4	21.58	22.69	79.42	17.66	22.07	16.42	22.88	17.05	21.67	15.34	22.29	18.15	22.46	15.36	23.76
1417/23	w.b.	30.8	18.31	27.16	79.57	18.18	16.55	17.25	18.35	17.71	16.97	15.48	17.43	18.99	17.78	16.84	18.33

1419/1/23	w.b.	32.19	20.66	31.41	79.27	26.49	20.03	25.95	21.32	25.87	19.62	23.44	20.67	26.54	20.72	27.48	22.27
1419/2/23	w.b.	23.23	20.01	21.94	79.43	17.5	18.34	17.18	20.08	17.25	18.57	15.38	19.2	20.03	20.62	15.55	19.93
1419/3/23	w.b.	21.91	21.3	21.83	79.43	18.7	21.3	16.85	21.8	17.43	19.61	14.64	19.75	17.8	21.45	16.27	20.93
1458/23	w.b.	32.21	21.47	23.87	79.57	20.35	20.57	18.48	21.45	20.09	20.37	17.76	20.65	19.29	21.33	17.97	21.97
1469/1/23	w.b.	22.66	19.17	22.37	79.57	19.83	19.01	17.41	19.65	18.35	17.52	16.73	18.13	19.18	18.75	16.67	18.97
1476/1/23	w.b.	26.14	21.23	26.2	78.98	23.02	20.76	20.37	21.4	21.81	20.11	20.27	20.34	22.11	19.13	20.39	20.51
1476/2/23	w.b.	31.67	23.08	31.91	79.43	27.67	22.61	26.6	22.71	26.56	21.33	25.49	22.16	26.25	20.11	25.27	20.64
1476/3/23	w.b.	25.57	18.76	21.99	79.65	23.68	20.75	21.79	20.47	21.31	18.35	19.93	19.01	22.1	17.44	20.76	18.68
1478/1/23	w.b.	27.91	19.44	30.62	79.28	25.57	19.56	23.26	19.09	17.96	22.93	22.21	18.35	23.77	17.24	22.68	17.58
1478/4/23	w.b.	24.71	20.66	26.86	79.27	22.67	20.34	19.15	19.75	21.62	19.96	18.98	19.94	21.95	18.06	19.94	19.35
1478/5/23	w.b.	27.79	21.73	22.4	79.79	24.65	21.13	22.39	20.49	22.93	19.22	21.41	19.51	23.89	18.6	21.59	18.31
1477/23	w.b.	20.87	20.32	15.57	79.64	14.5	19.73	14.98	18.71	15.36	18.94	14.12	19.89	18.37	19.98	14.83	20.82
1480/1/23	w.b.	22.1	20.35	15.36	79.33	18.53	21.29	15.91	20.77	15.95	19.51	14.14	20.59	17.24	19.6	17.82	20.52
1480/3/23	w.b.	21.01	18.29	19.7	79.64	19.12	17.86	15.63	18.17	17.98	16.4	16.42	17.04	19.3	17.78	16.71	17.59
1481/23	w.b.	21.3	20.06	17.07	79.5	18.29	19.64	15.74	20.42	16.19	17.76	14.66	18.89	17.14	18.13	15.45	19.31
1482/3/23	w.b.	28.77	21.39	17.84	79.2	17.45	21.31	12.84	21.14	16.22	20.55	14.59	20.56	18.06	20.64	15.2	21.73
1482/5/23	w.b.	NA	22.45	30.89	79.79	34.33	21.96	32.9	22.18	32.74	20.95	32.16	20.69	34.78	22.73	29.83	23.23
1968/23	serum	32.05	30.88	24.99	79.5	27.67	31.96	24.84	31.41	26.64	30.5	25.2	31.08	26.99	29.32	24.3	30.28
1969/23	serum	31.92	32.17	27.98	79.45	28.38	31.37	27.31	33.14	27.87	31.36	26.34	32.49	27.87	30.72	25.99	31.98
vac K-KB	in. vac	40.37	NA	25.13	77.77	21.49	39.19	23.72	42.28	23.86	NA	19.61	NA	23.8	40.88	21.15	37.71
1361/24	w.b.	NA	22.43	34.86	79.29	NA	20.64	NA	21.19	NA	21.09	NA	21.01	NA	19.38	NA	21.25
1362/24	s.	NA	24.55	35.81	79.74	NA	19.26	NA	21.98	NA	22.16	NA	22.6	NA	22.07	NA	23.17
1299/4/24	w.b.	NA	18.67	36.76	78.12	NA	18.16	NA	18.83	NA	16.76	NA	16.99	NA	19.15	NA	19.66

Stram- assay designed by Stram et al. [21]; Erster- assay designed by Erster et al.[17]; Sensi- SensiFAST SYBR® No-ROX Kit (Bioline) was used for Erster et al. assay [21]; all the last- comparative tests of Mix-2 and Mix-8 recently validated assays; Ct- cycle threshold; w.b. - whole blood; b.c. - buffy coat; P. - plasma; s. - spleen; s+l- mix of spleen and lung; NA- not amplified; b -ACT- β- actin; Quanta - qScript XLT One-Step RT-qPCR ToughMix(Quantabio); AgPath- AgPath-ID™ One-Step RT-PCR Kit (Life technologies); Clara- Clara™ Probe 1-Step Mix No-ROX (PCR biosystems); Promega- GoTaq 1-Step RT-qPCR System (Promega); Takara- One Step PrimeScript™ RT-PCR Kit (Takara Bio Inc.); Tm- melting temperature. The horizontal line separates negative from positive samples. Samples signed in bold, showed different results (positive vise negative, and vise versa) in different RT-qPCR assays