Lab ID: LXXX

A. Purity and Quantity of RNA A and RNA B

A.1 Spectrophotometric data provided by your lab

sample	260nm	280nm	320nm	Purity	Quantity (ng/µl blood)	Dilution factor	Extraction vol. (ul)	Elution vol. (ul)	Buffer
RNA A	2.853	1.489	.	1.916	1.826	1	2500	40	br5
RNA B	2.684	1.369	.	1.960	1.718	1	2500	40	br5

A.2 Additional information provided by your lab

| sample	Time interval (hours)		Temperature of RNA storage		Extraction	Spectrophotometer	
	arrival to extraction	extraction to analysis	arrival to extraction	extraction to analysis		producer	supplier
RNA A	0.25 h	2.25 h	18°C	4°C	PAXgene	Nanodrop technologies	nd-1000 uv/vis
RNA B	24.25 h	2.00 h	4°C	4°C			

A.3 Your lab (●) versus overall distribution – Purity

In the figures the blue lines represent the Action Limits (ALs) and the gray lines represent the Warning Limits (WLs).

Lower AL=1.58; Upper AL=2.20
Lower WL=1.74; Upper WL=2.14

RNA A (N=85)
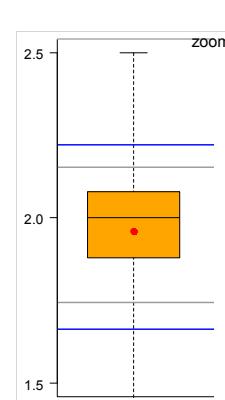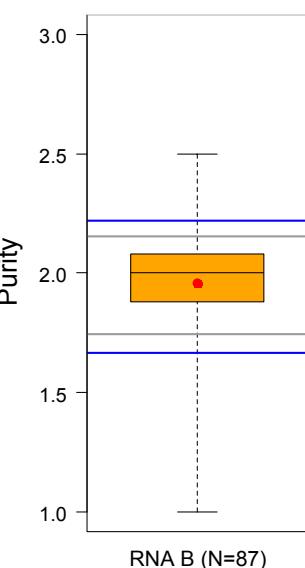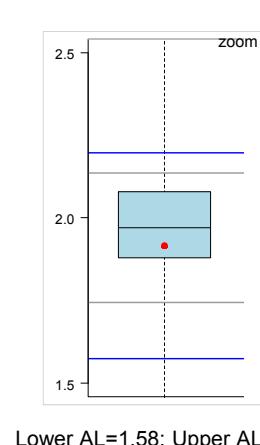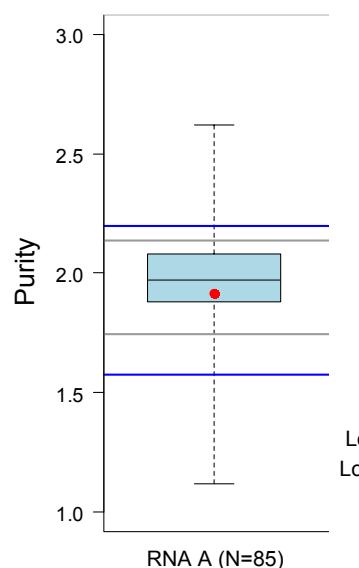
in control

Lower AL=1.66; Upper AL=2.22
Lower WL=1.74; Upper WL=2.15

RNA B (N=87)

in control

A.4 Your lab (●) versus overall distribution – Quantity

In the figures the blue line represents the Action Limit (AL) and the gray line represents the Warning Limit (WL).


AL=0.34; WL=1.06

RNA A (N=87)

in control

AL=0.26; WL=0.92

RNA B (N=88)

in control

SPIDIA – RNA: Laboratory report
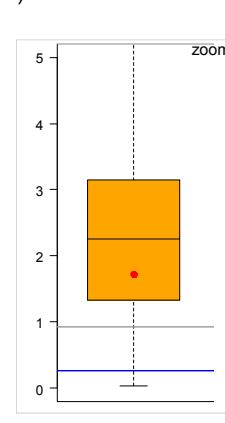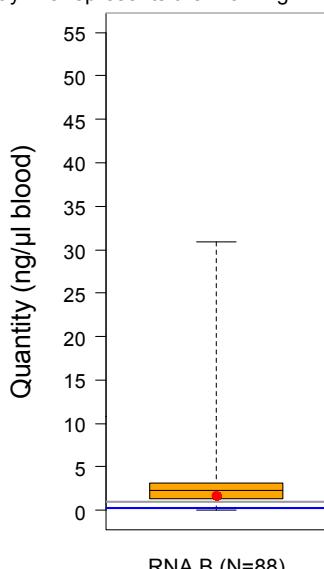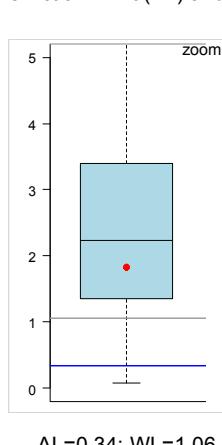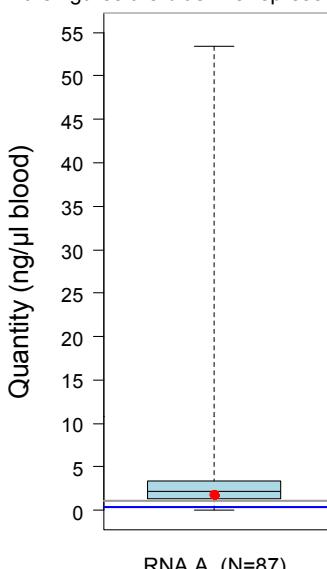
Lab ID: LXXX

B. Integrity of RNA A and RNA B

B.1 Your lab (●) versus overall distribution – RIN number

In the figures the blue line represents the Action Limit (AL) and the gray line represents the Warning Limit (WL).

RNA A (N=77)

AL=2.61 WL=4.77

in control

RNA B (N=78)

AL=2.49 WL=4.25

in control
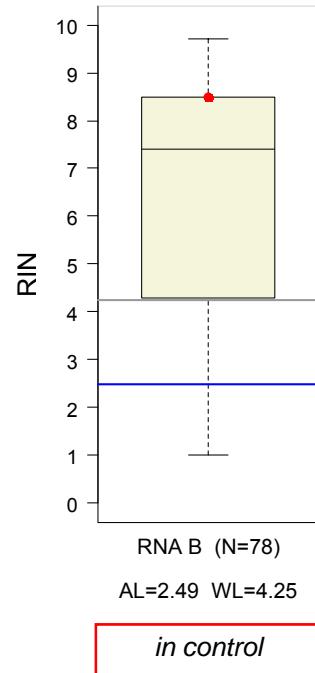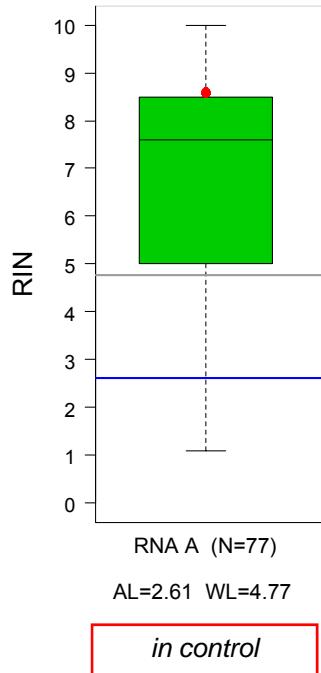
B.2 Electropherogram Agilent

RNA A

RNA B

SPIDIA – RNA: Laboratory report
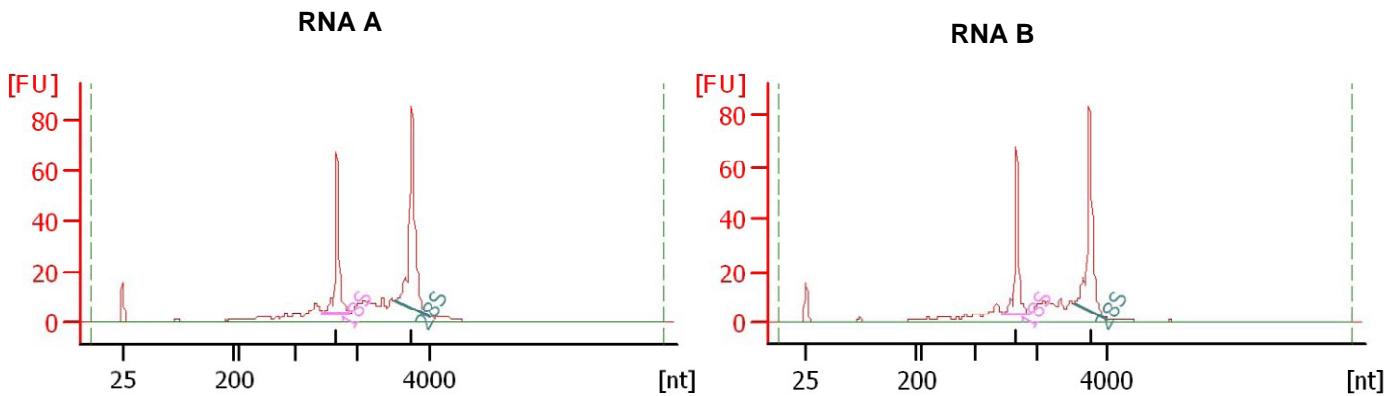
Lab ID: LXXX

C. Quantification of four genes by real-time PCR on RNA A and RNA B

C.1 Your lab (●) versus overall distribution – RNA A

In the figures the blue lines represent the Action Limits (ALs) and the gray lines represent the Warning Limits (WLs).

C-FOS

RNA A (N=91)

Lower AL=6.74; Upper AL=8.98
Lower WL=7.04; Upper WL=8.80

in control

GAPDH

RNA A (N=91)

Lower AL=5.63; Upper AL=7.99
Lower WL=6.09; Upper WL=7.68

in control

IL1b

RNA A (N=91)

Lower AL=5.64; Upper AL=7.06
Lower WL=5.81; Upper WL=6.90

in control

IL8

RNA A (N=91)

Lower AL=6.64; Upper AL=8.91
Lower WL=6.73; Upper WL=8.70

*in control*

Log$_{10}$ (copies/µg total RNA)

C.2 Your lab (●) versus overall distribution – RNA B

In the figures the blue lines represent the Action Limits (ALs) and the gray lines represent the Warning Limits (WLs).


C-FOS

RNA B (N=92)

Lower AL=6.79; Upper AL=9.02
Lower WL=7.13; Upper WL=8.79

in control

GAPDH

RNA B (N=92)

Lower AL=5.68; Upper AL=7.78
Lower WL=6.14; Upper WL=7.48

in control

IL1b

RNA B (N=92)

Lower AL=5.51; Upper AL=7.11
Lower WL=5.78; Upper WL=6.85

in control

IL8

RNA B (N=92)

Lower AL=6.57; Upper AL=8.92
Lower WL=6.69; Upper WL=8.67

in control

Log$_{10}$ (copies/µg total RNA)
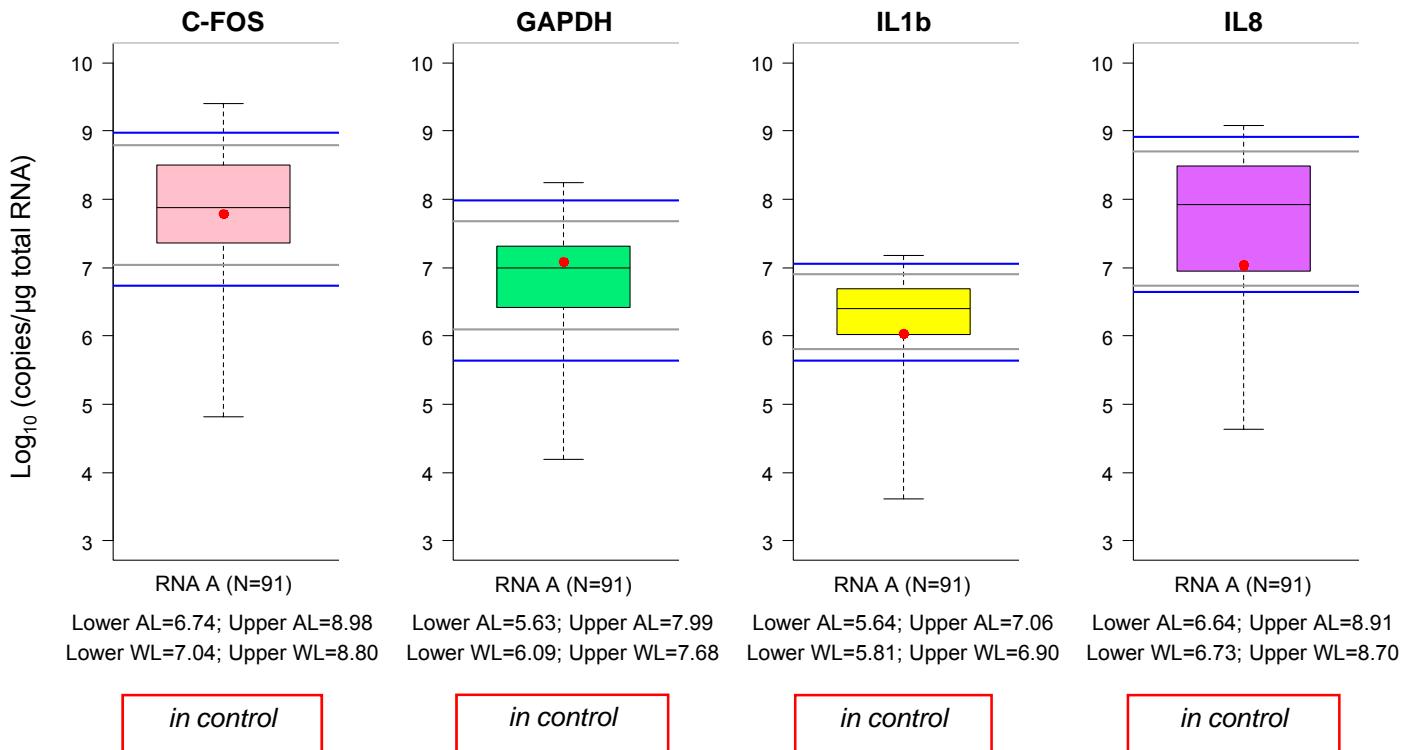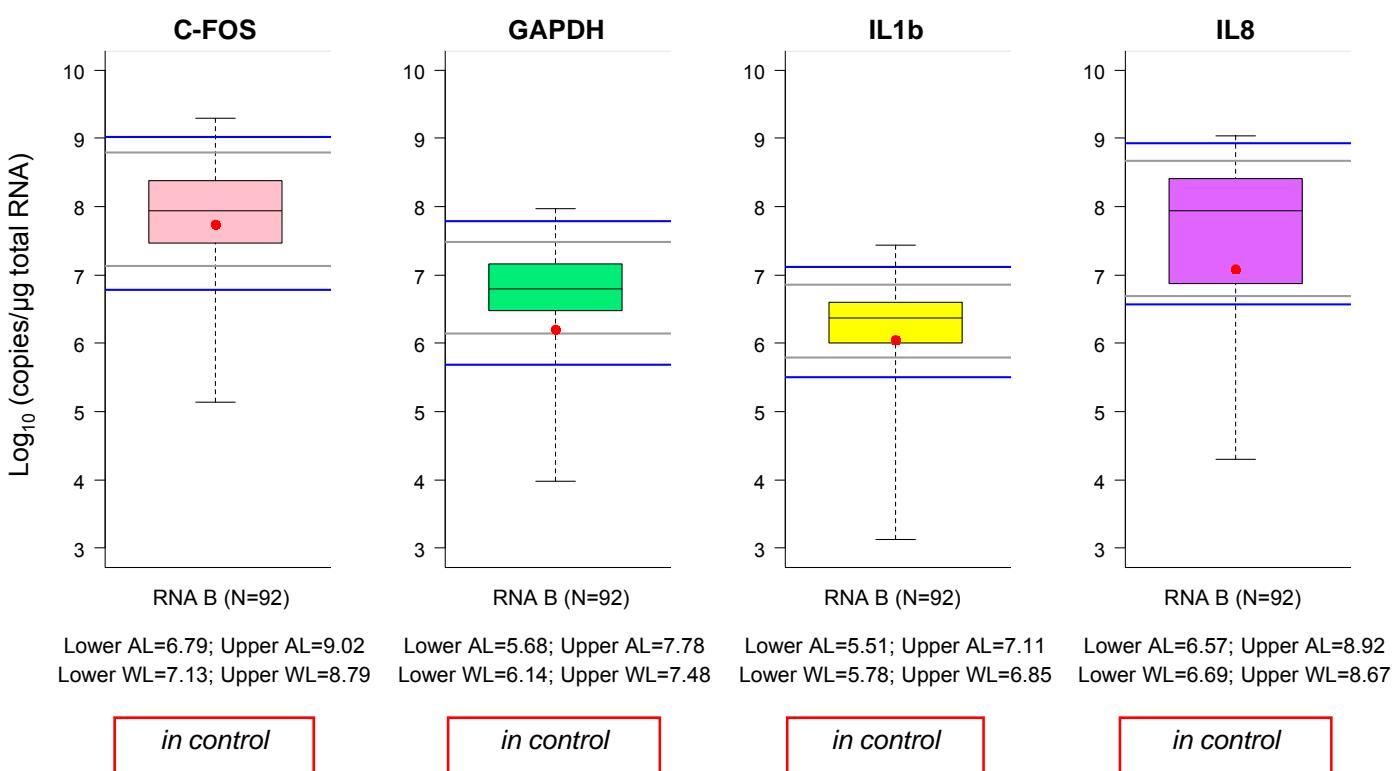
D. Interferences in quantification of four genes by real-time PCR on RNA A and RNA B

D.1 Your lab (●) versus overall distribution – RNA A

In the figures the two lines represent the two Kineret threshold for outliers identification: 5.99 (weak outlier) and 9.21 (strong outlier).

| C-FOS	GAPDH	IL1b	IL8
RNA A (N=89)	RNA A (N=76)	RNA A (N=90)	RNA A (N=91)
in control	*in control*	*in control*	*in control*

D.2 Your lab (●) versus overall distribution – RNA B

In the figures the two lines represent the two Kineret threshold for outliers identification: 5.99 (weak outlier) and 9.21 (strong outlier).

C-FOS	GAPDH	IL1b	IL8
RNA B (N=91)	RNA B (N=71)	RNA B (N=90)	RNA B (N=91)
in control	*in control*	*in control*	*in control*
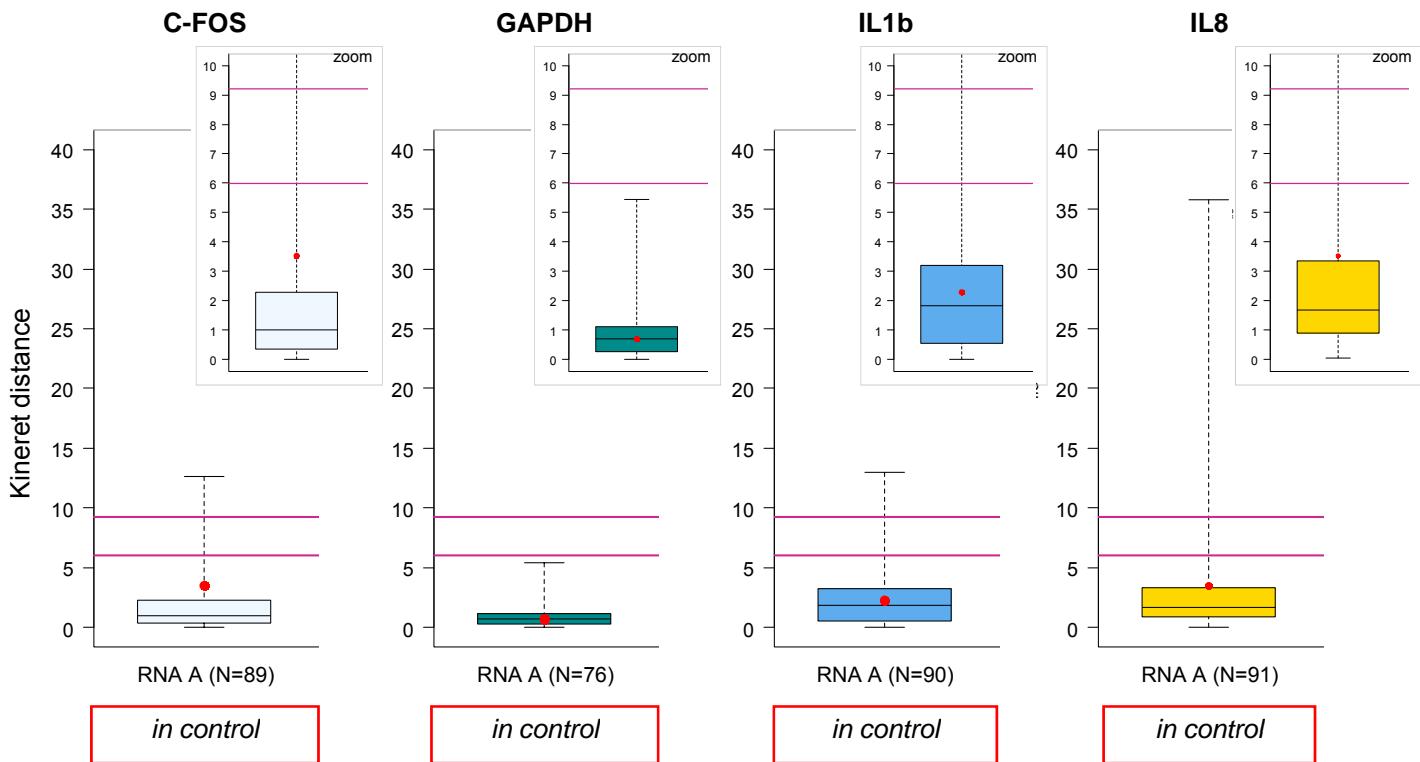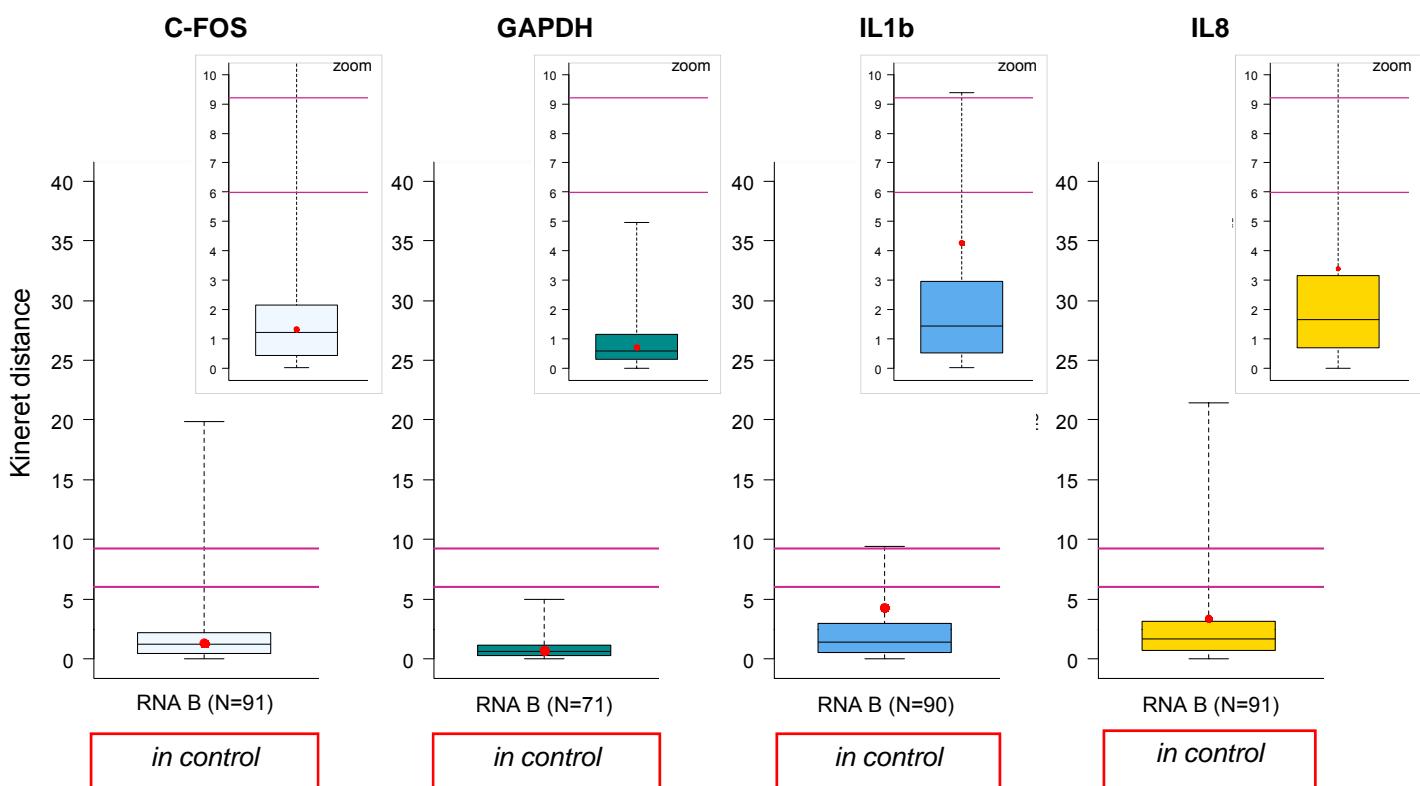
Lab ID: LXXX

E. Summary

	Performance			Missing	Comments
RNA A – Purity	**in control**				
RNA B – Purity	**in control**				
RNA A – Quantity	**in control**				
RNA B – Quantity	**in control**				
RNA A – Integrity	**in control**				
RNA B – Integrity	**in control**				
RNA A – C-FOS quant	**in control**				
RNA A – GAPDH quant	**in control**				
RNA A – IL1b quant	**in control**				
RNA A – IL8 quant	**in control**				
RNA B – C-FOS quant	**in control**				
RNA B – GAPDH quant	**in control**				
RNA B – IL1b quant	**in control**				
RNA B – IL8 quant	**in control**				
RNA A – C-FOS interferences	**in control**				
RNA A – GAPDH interferences	**in control**				
RNA A – IL1b interferences	**in control**				
RNA A – IL8 interferences	**in control**				
RNA B – C-FOS interferences	**in control**				
RNA B – GAPDH interferences	**in control**				
RNA B – IL1b interferences	**in control**				
RNA B – IL8 interferences	**in control**				