Lab ID: LXXX

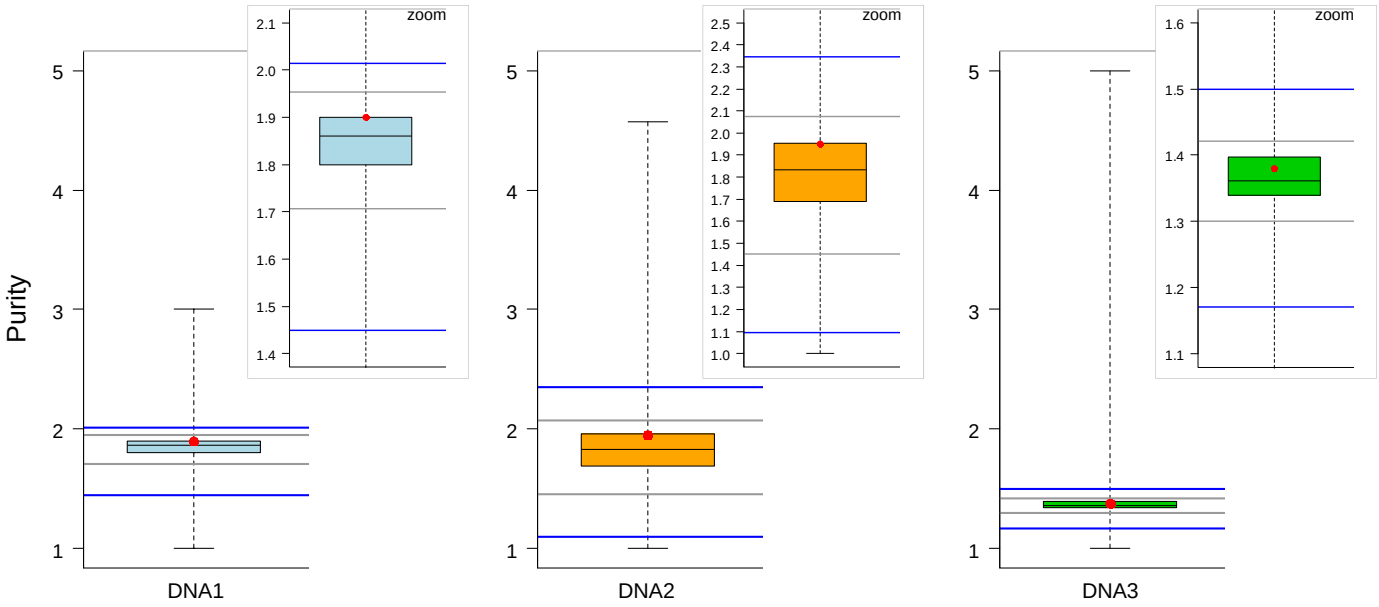
A. Purity and concentration of DNA1, DNA2 and DNA3 (pre-extracted DNAs)

A.1 Spectrophotometric data provided by your lab

	260nm	280nm	320nm	Purity	Concentration (ng/µl)	Dilution factor
DNA1	1.343	0.705	.	1.90	67.14	1
DNA2	0.357	0.183	.	1.95	17.85	1
DNA3	1.574	1.137	.	1.38	78.72	1

A.2 Your lab (●) versus overall distribution (N=172) – Purity

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



Lower AL=1.45; Upper AL=2.01
Lower WL=1.71; Upper WL=1.95

in control

Lower AL=1.09; Upper AL=2.35
Lower WL=1.45; Upper WL=2.08

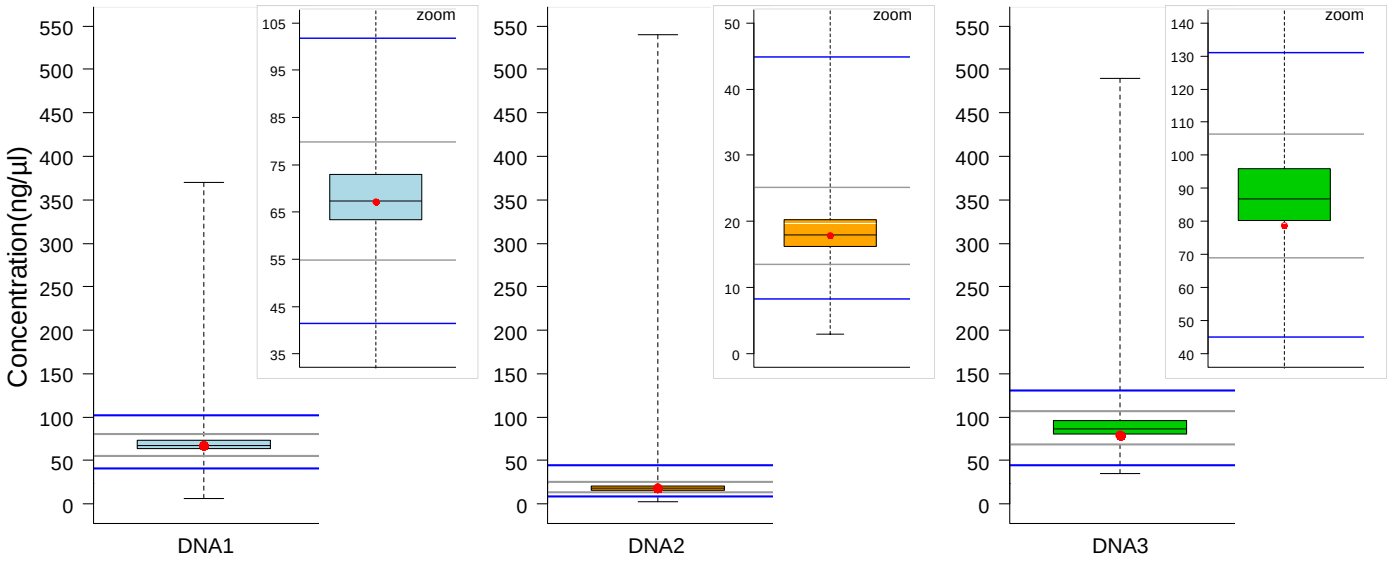
in control

Lower AL=1.17; Upper AL=1.50
Lower WL=1.30; Upper WL=1.42

in control

A.3 Your lab (●) vs overall distribution (N=174) – Concentration

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



Lower AL=41.45; Upper AL=101.73
Lower WL=54.81; Upper WL=79.82

in control

Lower AL=8.27; Upper AL=44.82
Lower WL=13.53; Upper WL=25.15

in control

Lower AL=44.98; Upper AL=130.95
Lower WL=68.97; Upper WL=106.37

in control

Lab ID: LXXX

B. Purity and Quantity of DNA4 (DNA extracted from blood)

B.1 Spectrophotometric data provided by your lab and by SPIDIA lab

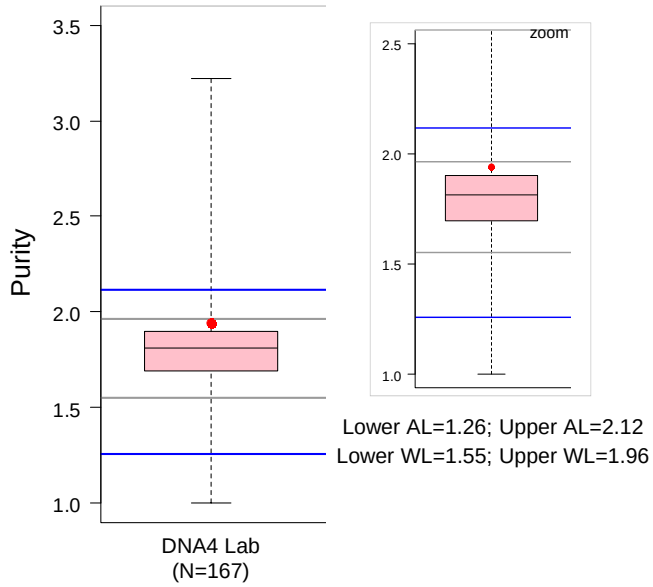
260nm Lab	280nm Lab	320nm Lab	Purity Lab	Quantity (ng/µl) Lab	**Purity Spidia**	**Quantity (ng/µl) Spidia**	Dilution factor	Extraction vol. (ul)	Elution vol. (ul)	Buffer
2.868	1.482	.	1.94	21.507	1.970	26.858	1	1000	150	TE 10.1

B.2 Additional information provided by your lab

Extraction		Spectrophotometer		Temperature of DNA storage		Time interval (hours)	
producer	supplier	producer	supplier	arrival to extraction	extraction to analysis	arrival to extraction	extraction to analysis
Homebrew	X	Labtech	Nanodrop ND-1000	-20 °C	20 °C	19 h	72 h

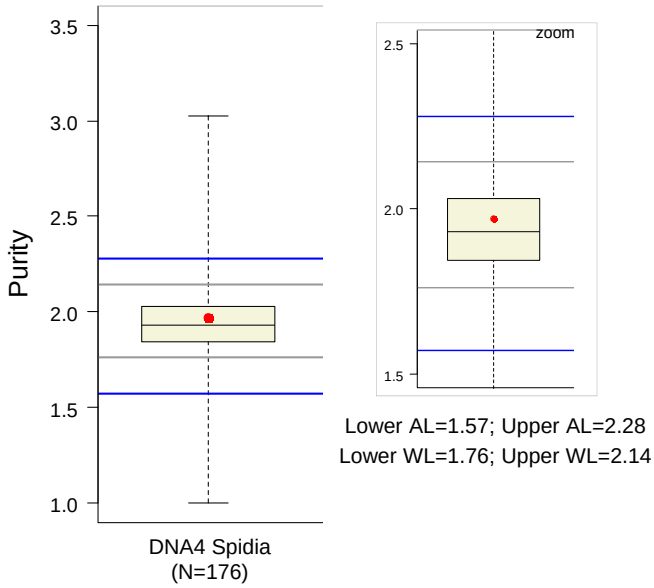
B.3 Your lab (●) versus overall distribution – Purity

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



Lower AL=1.26; Upper AL=2.12
Lower WL=1.55; Upper WL=1.96

in control

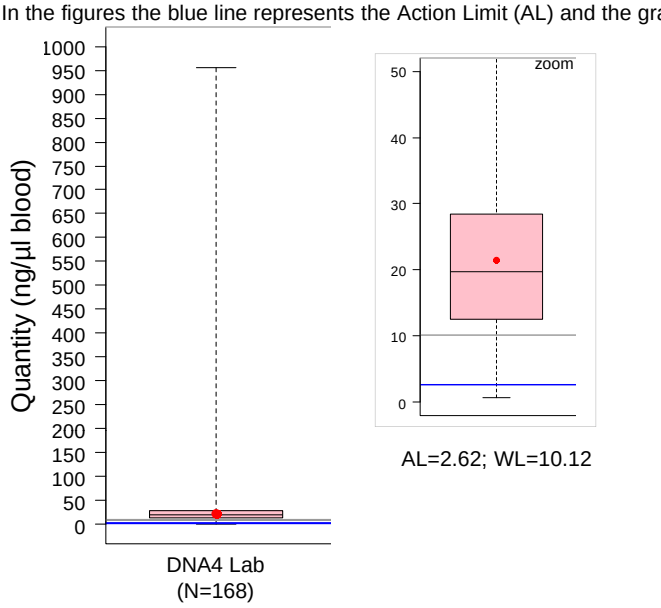


Lower AL=1.57; Upper AL=2.28
Lower WL=1.76; Upper WL=2.14

in control

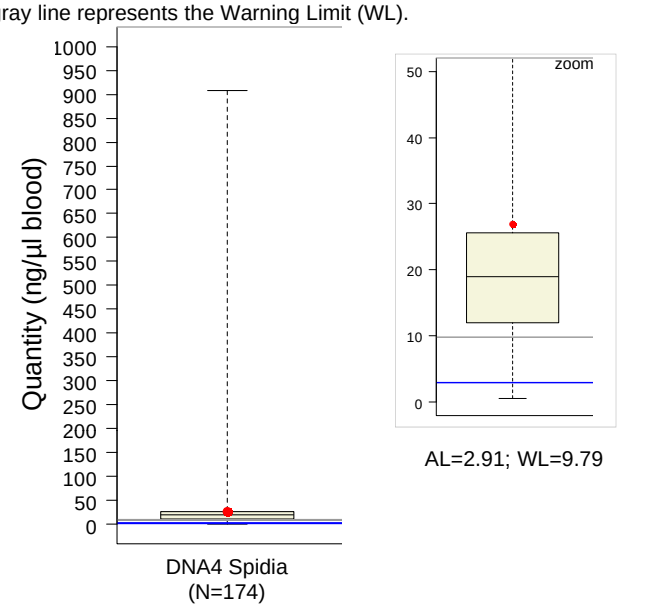
B.4 Your lab (●) versus overall distribution - Quantity

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



AL=2.62; WL=10.12

in control



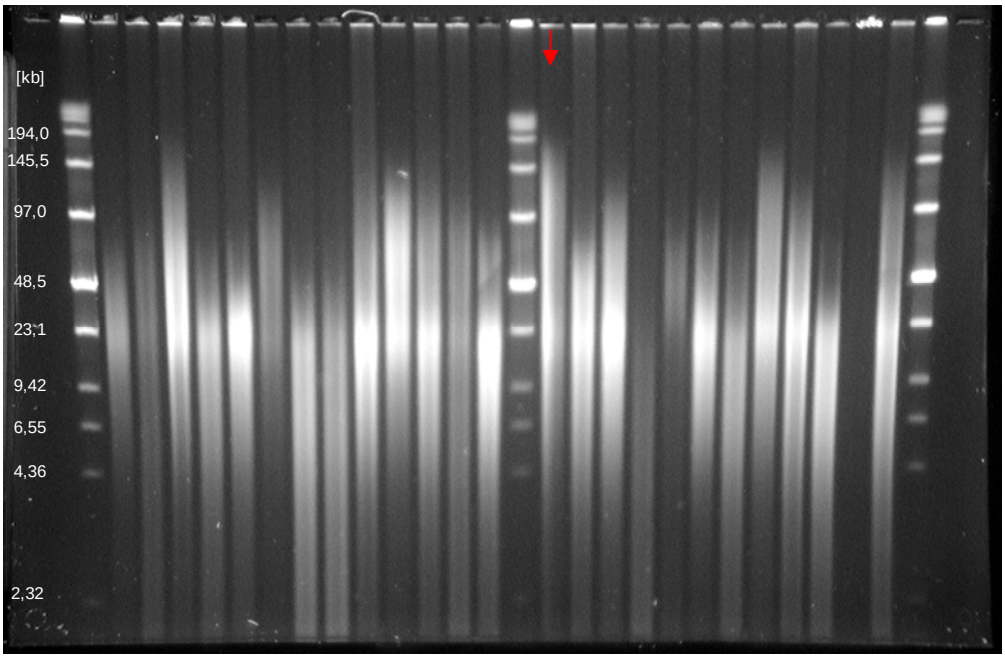
AL=2.91; WL=9.79

in control

Lab ID: LXXX

C. Integrity of DNA4 (DNA extracted from blood)

C.1 Your lab (↓) - Pulse field gel electrophoresis image

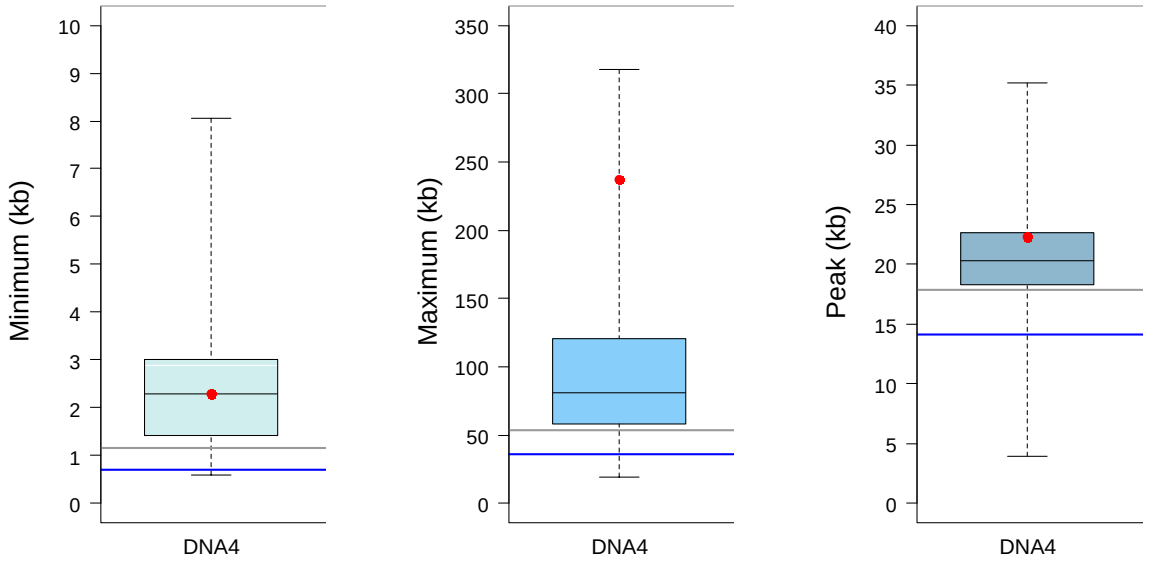


C.2 ImageJ data of your lab

Minimum (Kb)	Maximum (Kb)	Peak (Kb)
2.299	236.800	22.317

C.3 Your lab (●) versus overall distribution (N=157) – ImageJ data

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



AL=0.70; WL=1.15	AL=36.29; WL=53.21	AL=14.15; WL=17.83
in control	*in control*	*in control*

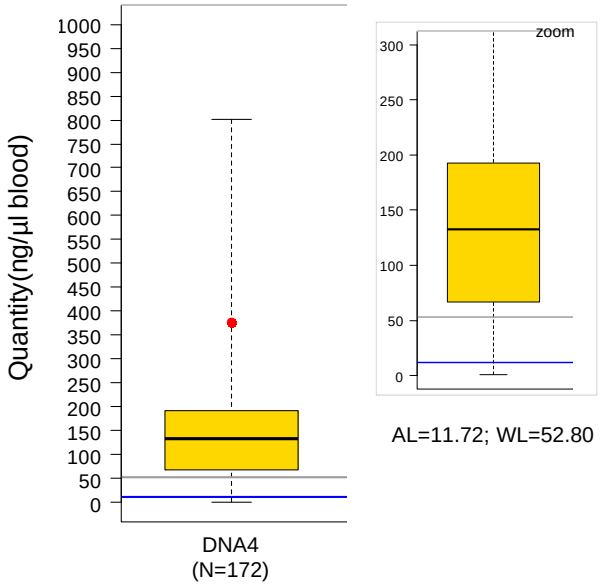
Lab ID: LXXX

D. Quantification of RNaseP by real-time PCR on DNA4 and evaluation of interferences

D.1 Your lab (●) versus overall distribution

Quantification of RNaseP

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

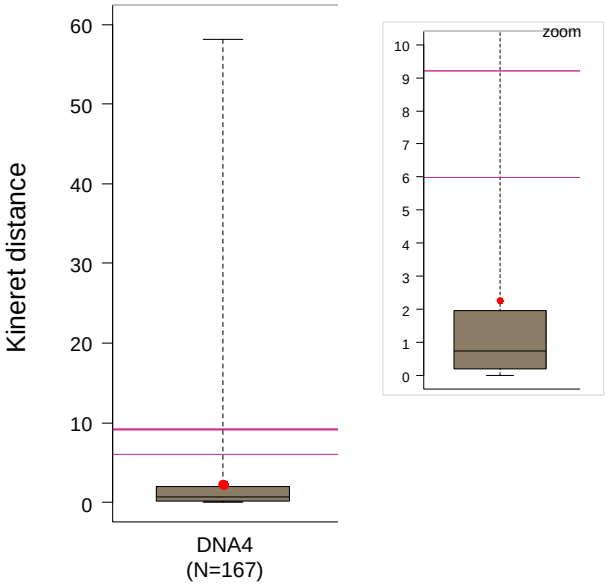


AL=11.72; WL=52.80

in control

Interferences

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



in control

Lab ID: LXXX

E. Integrity of DNA5 (DNA extracted from plasma)

E.1 Isohelix/Agilent analysis - Ratio integrity

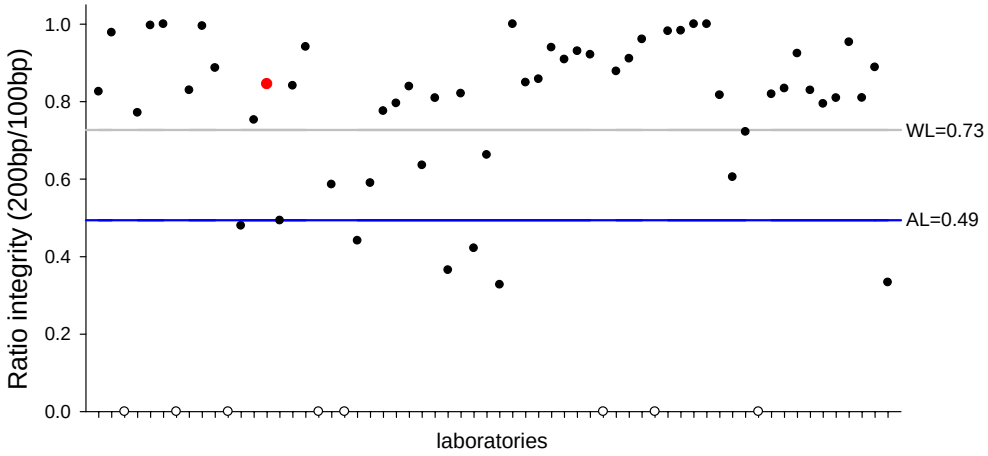
Ratio integrity 200bp/100bp	Ratio integrity 300bp/100bp	Ratio integrity 400bp/100bp	Extraction vol. (ul)	Elution vol. (ul)	Buffer
0.845	0.647	0.526	1000	50	TE 10.1

E.2 Additional information provided by your lab

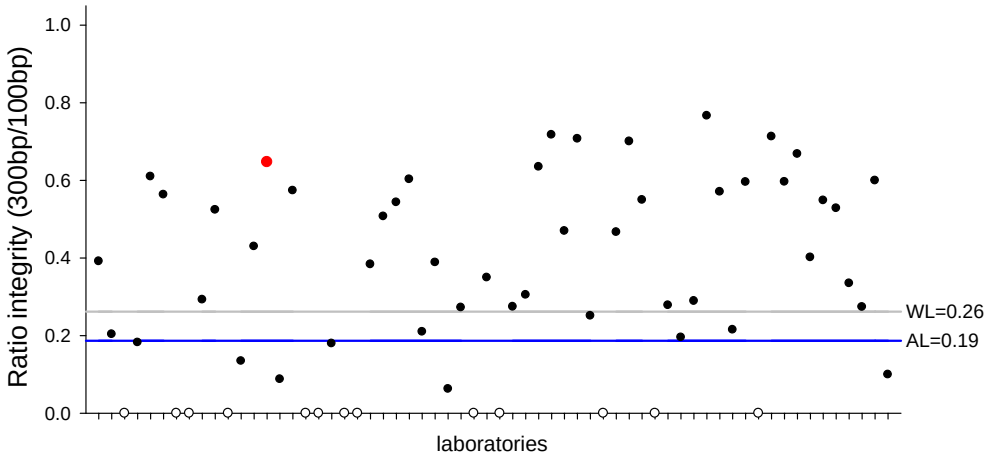
Extraction		Temperature of DNA storage		Time interval (hours)	
producer	supplier	arrival to extraction	extraction to analysis	arrival to extraction	extraction to analysis
QIAmp DNA Blood mini kit	QIAGEN 51106	-20 °C	20 °C	19 h	72 h

E.3 Your lab (●) versus overall distribution (N=62) – Ratio integrity

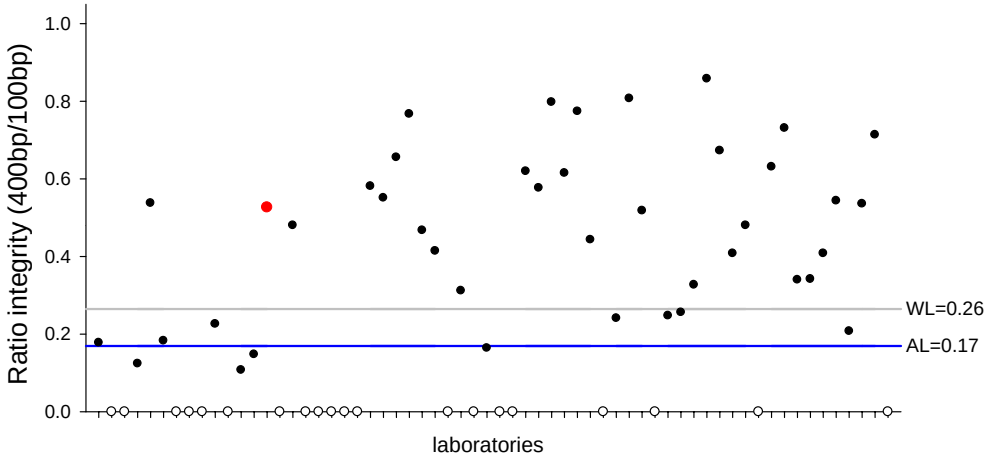
In the figures the blue line represents the Action Limit (AL) and the gray line represents the Warning Limit (WL).



in control



in control



in control

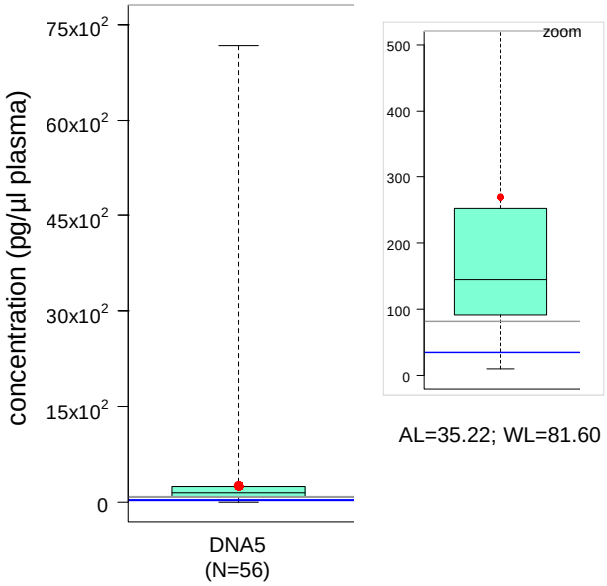
Lab ID: LXXX

F. Quantification of RNaseP by real-time PCR on DNA5 and evaluation of interferences

F.1 Your lab (●) versus overall distribution

Quantification of RNaseP

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

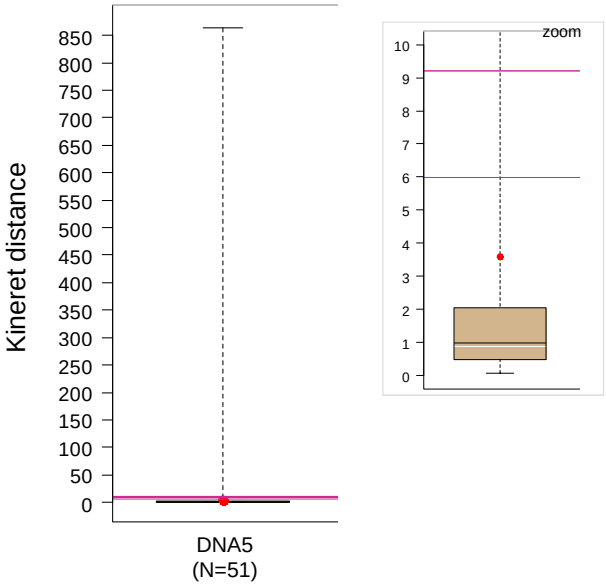


AL=35.22; WL=81.60

in control

Interferences

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

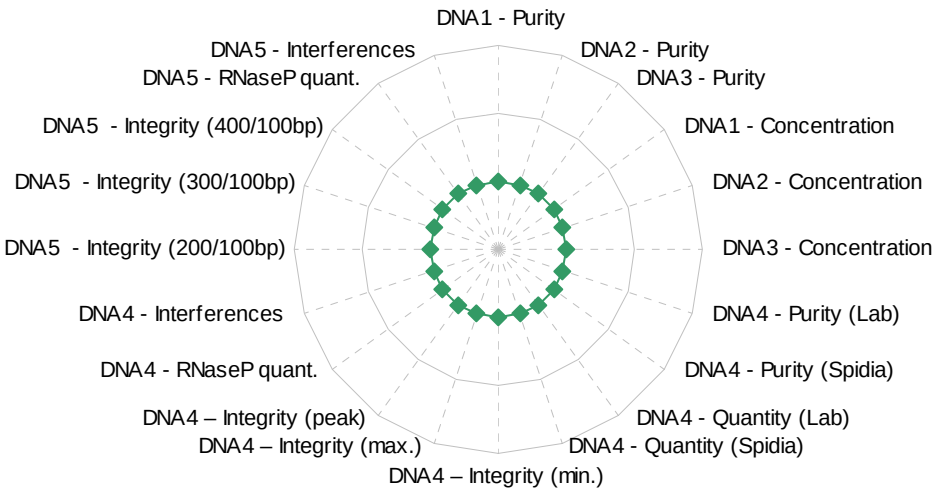


in control

Lab ID: LXXX

G. Summary

	Performance			Missing	Comments
DNA1 – Purity	in control				
DNA2 – Purity	in control				
DNA3 – Purity	in control				
DNA1 – Concentration	in control				
DNA2 – Concentration	in control				
DNA3 – Concentration	in control				
DNA4 – Purity (Lab)	in control				
DNA4 – Purity (Spidia)	in control				
DNA4 – Quantity (Lab)	in control				
DNA4 – Quantity (Spidia)	in control				
DNA4 – Integrity (min.)	in control				
DNA4 – Integrity (max.)	in control				
DNA4 – Integrity (peak)	in control				
DNA4 – RNaseP quant.	in control				
DNA4 – Interferences	in control				
DNA5 – Integrity (200/100bp)	in control				
DNA5 – Integrity (300/100bp)	in control				
DNA5 – Integrity (400/100bp)	in control				
DNA5 – RNaseP quant.	in control				
DNA5 – Interferences	in control				



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