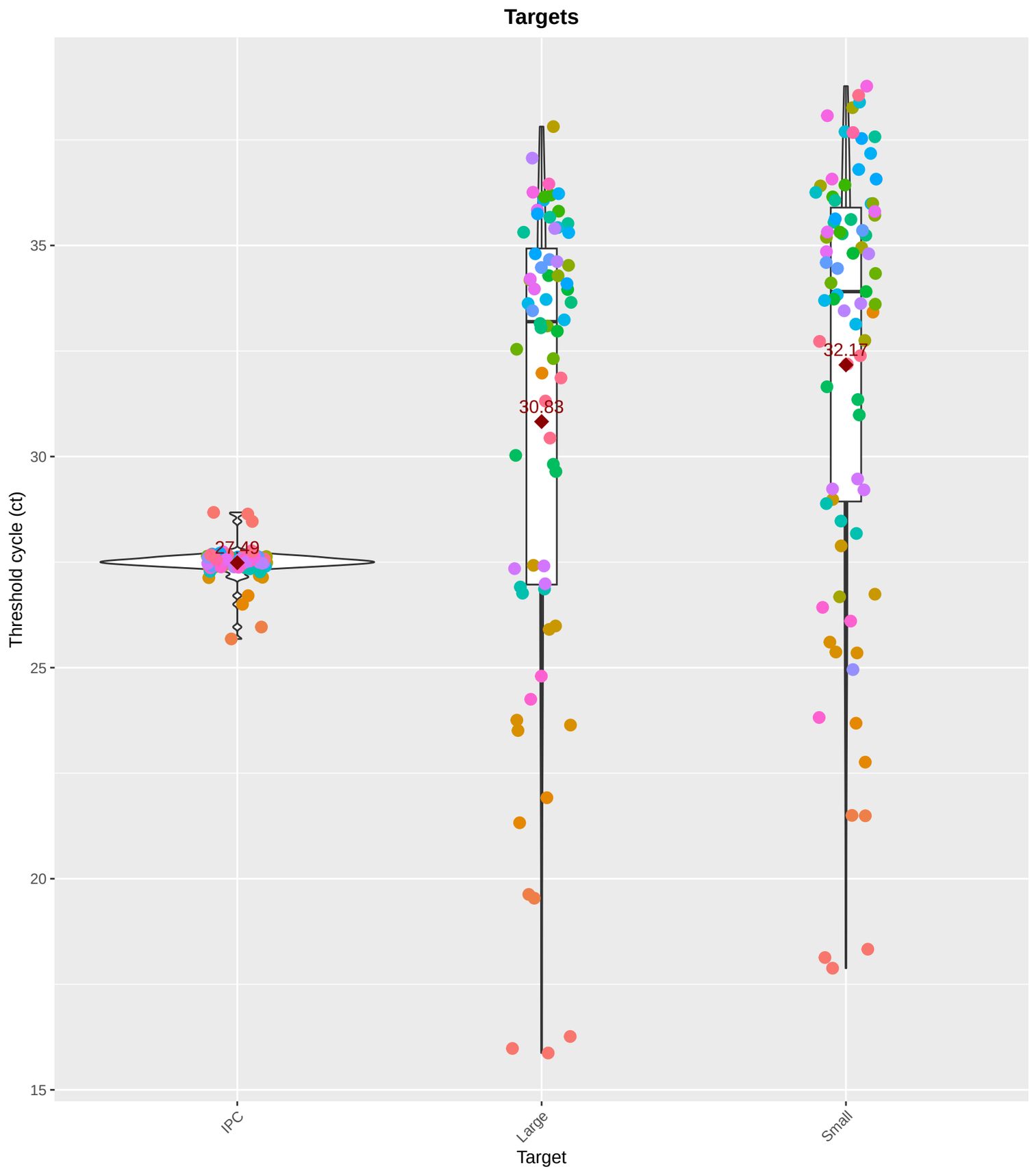


Sample name

- Standard 1
- Standard 2
- Standard 3
- Standard 4
- Standard 5
- Standard 6
- Standard 7
- CSF 0019_Neat_QIAamp column
- CSF 0027_Neat_QIAamp column
- CSF_Neat_QIAamp column
- Plasma_Neat_QIAamp column
- Conditioned media_Neat_QIAamp column
- CSF_UF10_QIAamp column
- Plasma_UF10_QIAamp column
- Conditioned media_UF10_QIAamp column
- CSF_SEC + UF10_QIAamp column
- Plasma_SEC + UF10_QIAamp column
- Conditioned media_SEC + UF10_QIAamp column
- Water_Neat_QIAamp column
- CSF 0019_Neat_XCF column
- CSF 0027_Neat_XCF column
- CSF_Neat_XCF column
- Plasma_Neat_XCF column
- Conditioned media_Neat_XCF column
- CSF_UF10_XCF column
- Plasma_UF10_XCF column
- Conditioned media_UF10_XCF column
- CSF_SEC + UF10_XCF column
- Plasma_SEC + UF10_XCF column
- Conditioned media_SEC + UF10_XCF column

Samples

Threshold cycle (ct)

35
30
25
20
15

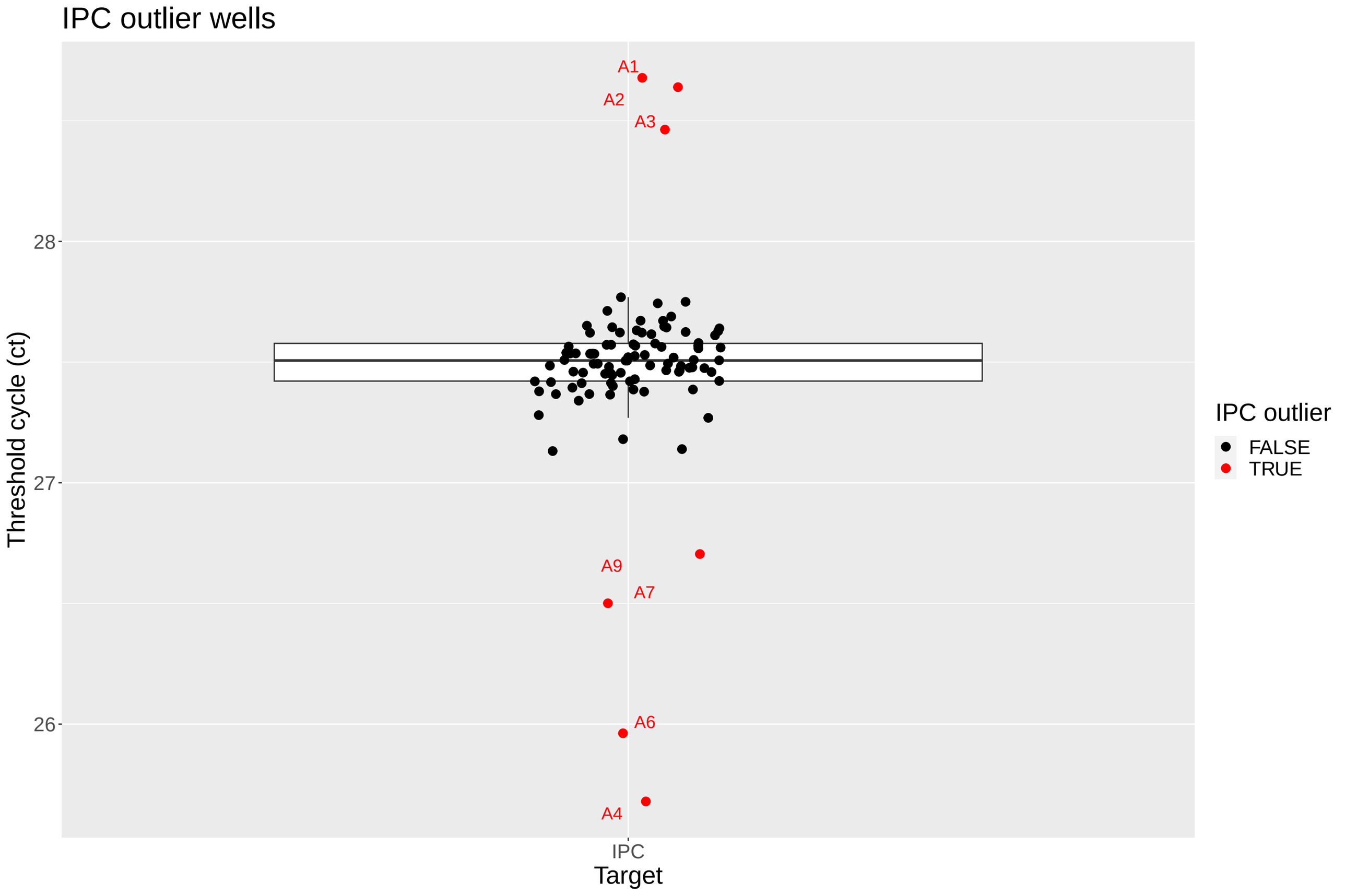
20.92
23.02
26.2
25.41
27.26
30.04
30.36
32.53
31.42
33.18
31.8
29.56
32.03
33.11
27.57
29.62
32.32
31.54
33.36
33.04
32.16
26.92
32.38
28.01
32.51
33.22
25.94
29.83
30.09
30.41

Target
IPC
Large
Small

Standard 1
Standard 2
Standard 3
Standard 4
Standard 5
Standard 6
Standard 7
CSF 0019_Neat_QIAamp column
CSF 0027_Neat_QIAamp column
CSF_Neat_QIAamp column
Plasma_Neat_QIAamp column
Conditioned media_Neat_QIAamp column
CSF_UF10_QIAamp column
Plasma_UF10_QIAamp column
Conditioned media_UF10_QIAamp column
CSF_SEC + UF10_QIAamp column
Plasma_SEC + UF10_QIAamp column
Conditioned media_SEC + UF10_QIAamp column
Water_Neat_QIAamp column
CSF 0019_Neat_XCF column
CSF 0027_Neat_XCF column
CSF_Neat_XCF column
Plasma_Neat_XCF column
Conditioned media_Neat_XCF column
CSF_UF10_XCF column
Plasma_UF10_XCF column
Conditioned media_UF10_XCF column
CSF_SEC + UF10_XCF column
Plasma_SEC + UF10_XCF column
Conditioned media_SEC + UF10_XCF column

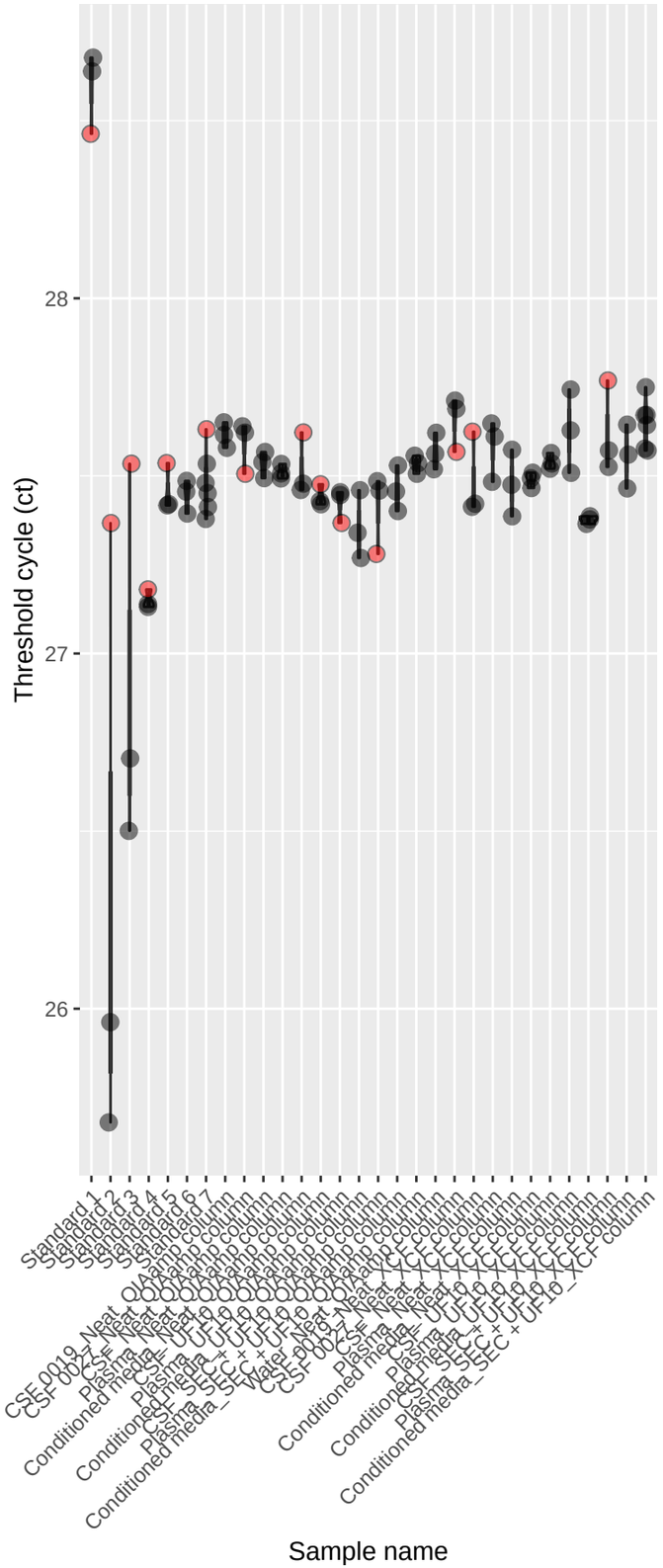
Sample name

IPC outlier wells

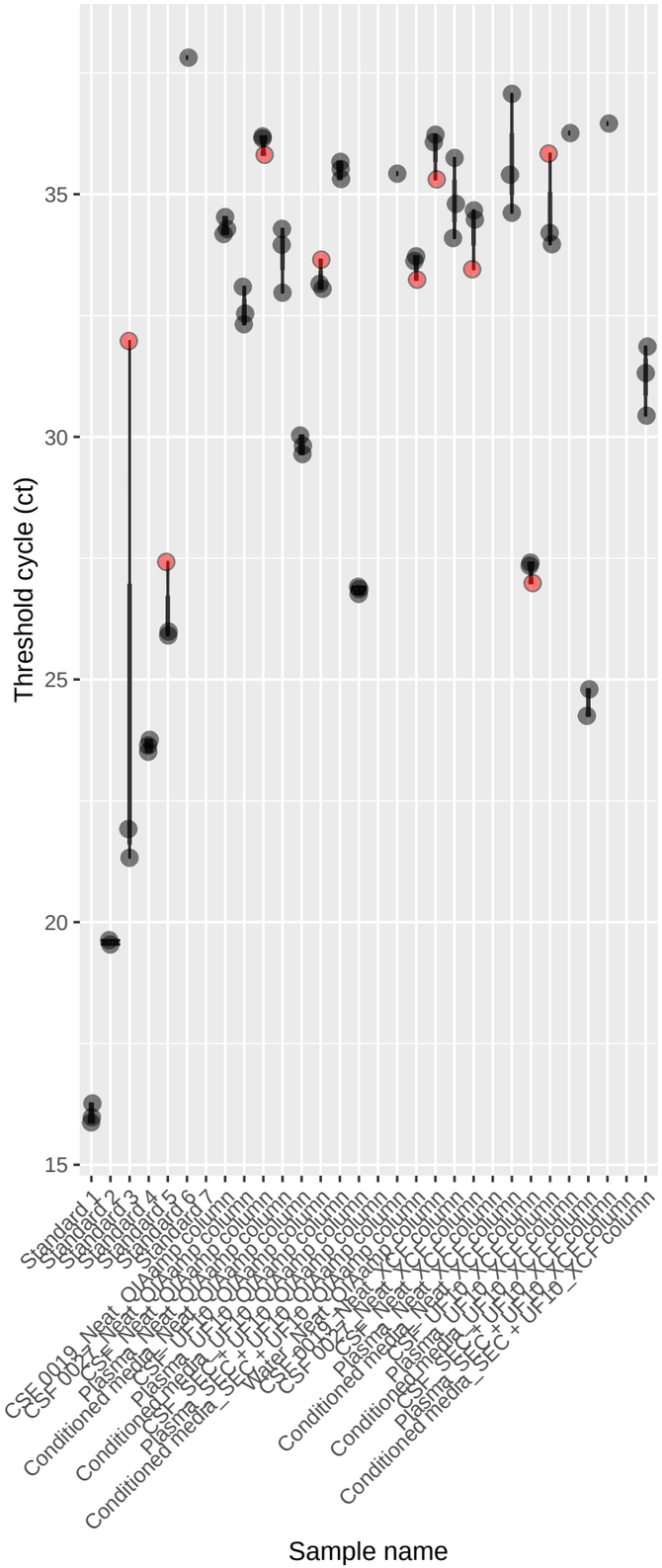


Outliers

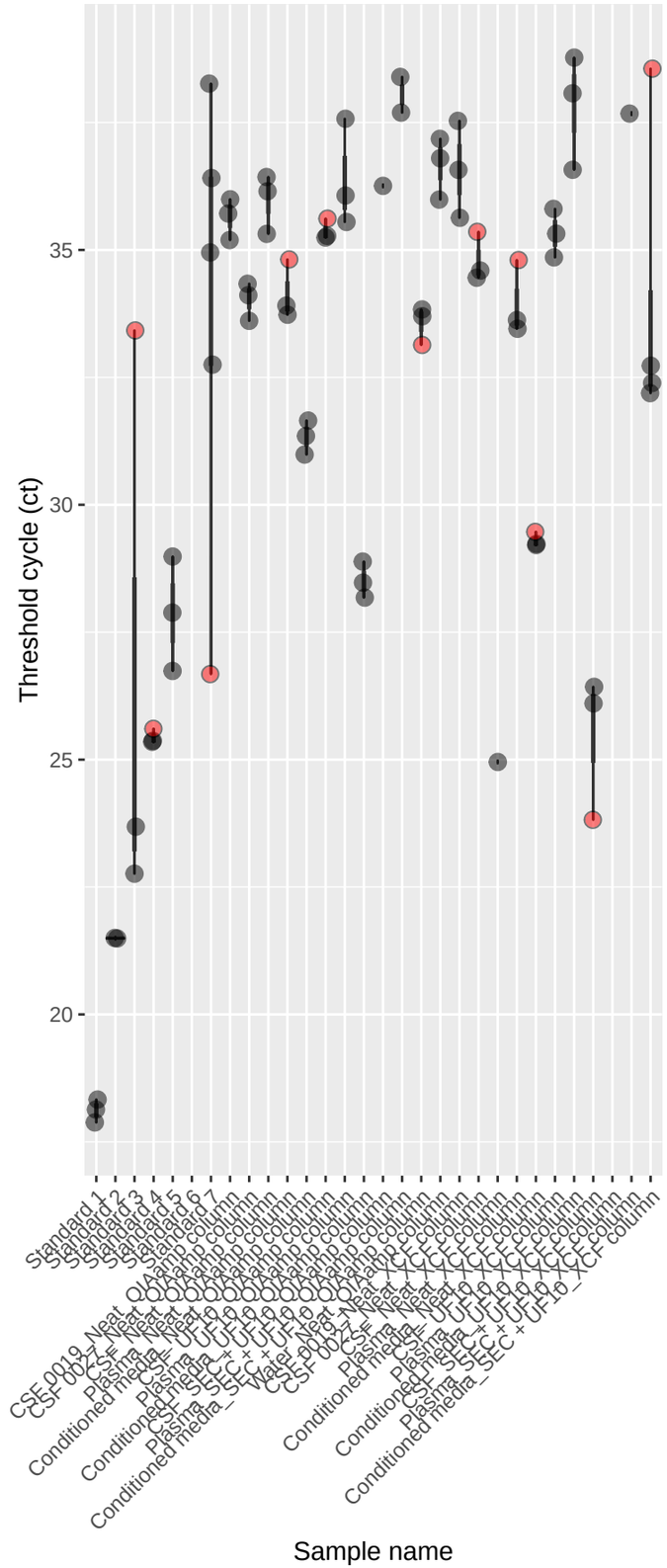
IPC



Large



Small



IPC standard curve

linear

y ~ x

$y = 26.7 + 0.0366\,x \quad R^2 = 0.574$

Threshold cycle (Ct)

29
28
27
26

0 10 20 30 40 50

Standard concentration (ng/µL)

log

y ~ log(x)

$y = 27.2 + 0.0506\,x \quad R^2 = 0.031$

Threshold cycle (Ct)

28
27
26

0 10 20 30 40 50

Standard concentration (ng/µL)

Large standard curve

linear

y ~ x

$y = 23 - 0.144\,x \quad R^2 = 0.751$

Threshold cycle (Ct)

Standard concentration (ng/µL)

log

y ~ log(x)

$y = 20.6 - 1.05\,x \quad R^2 = 0.986$

Threshold cycle (Ct)

Standard concentration (ng/µL)

Small standard curve

linear

y ~ x

$y = 25.1 - 0.144\,x \quad R^2 = 0.693$

Threshold cycle (Ct)

25

20

15

0 10 20 30 40 50

Standard concentration (ng/µL)

log

y ~ log(x)

$y = 22.5 - 1.03\,x \quad R^2 = 0.973$

Threshold cycle (Ct)

27.5

25.0

22.5

20.0

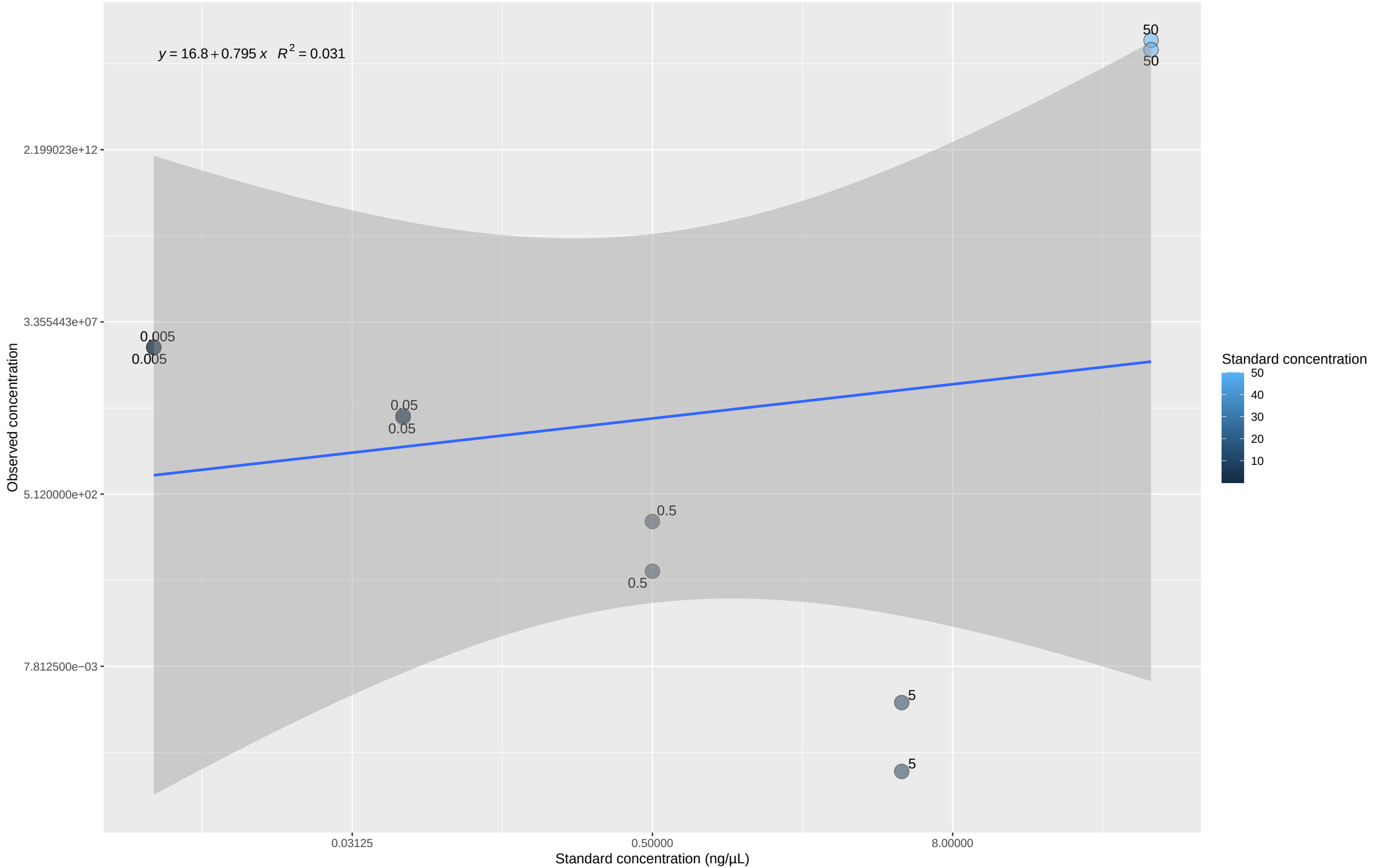
17.5

0 10 20 30 40 50

Standard concentration (ng/µL)

IPC

Predictive model: linear [y ~ x]



Large

Predictive model: log [y ~ log(x)]

$y = -0.0103 + 0.986\,x \quad R^2 = 0.986$

Observed concentration

128.00000
8.00000
0.50000
0.03125

Standard concentration (ng/µL)

0.03125
0.50000
8.00000

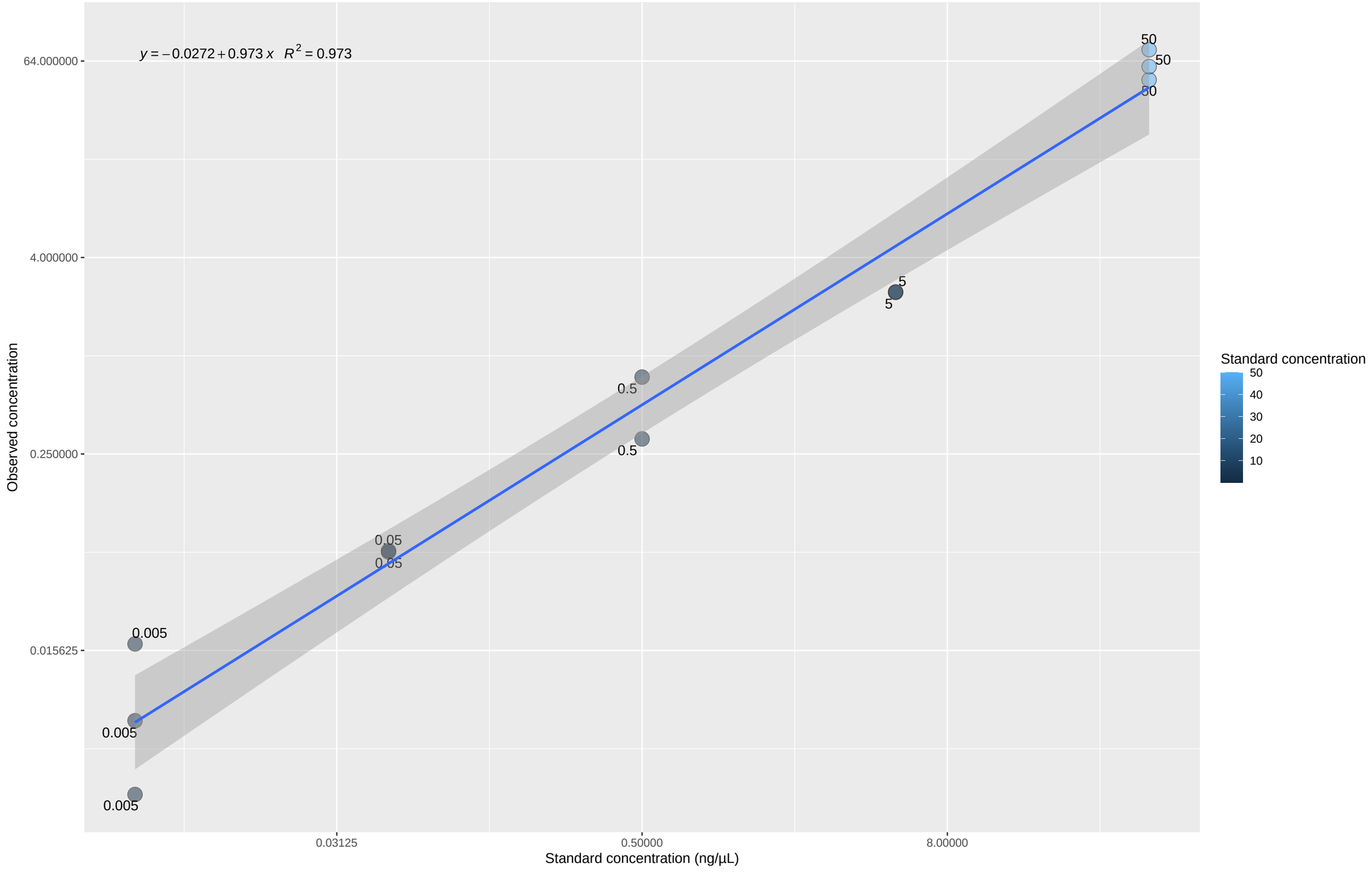
50
50
50
5
5
0.5
0.5
0.05
0.05
0.05
0.005
0.005

Standard concentration

50
40
30
20
10

Small

Predictive model: log [y ~ log(x)]



Quality index

Plasma_Neat_XCF column

CSF_Neat_QIAamp column

CSF 0027_Neat_XCF column

20

15

10

5

0

Quality index

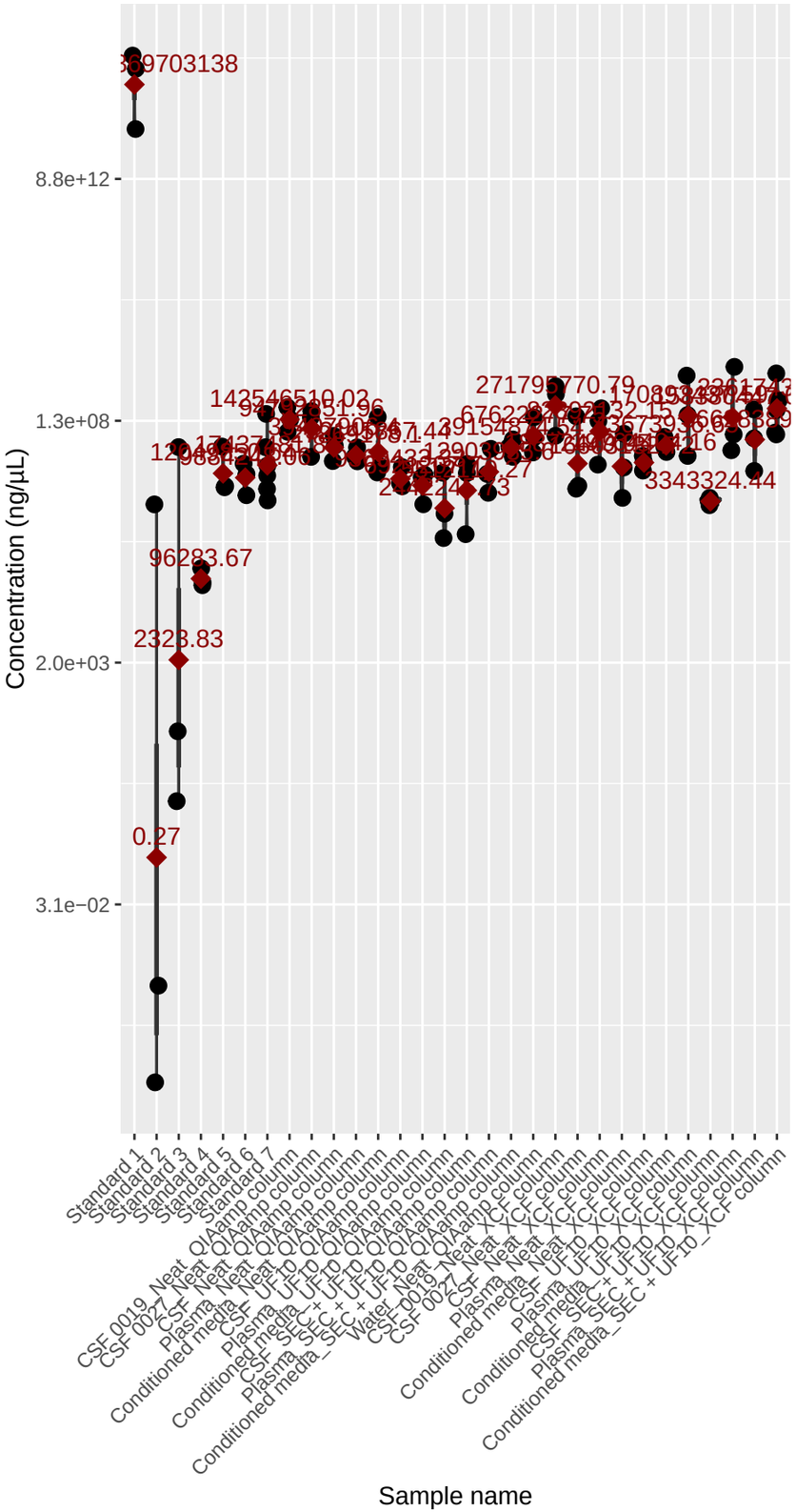
Sample

Standard

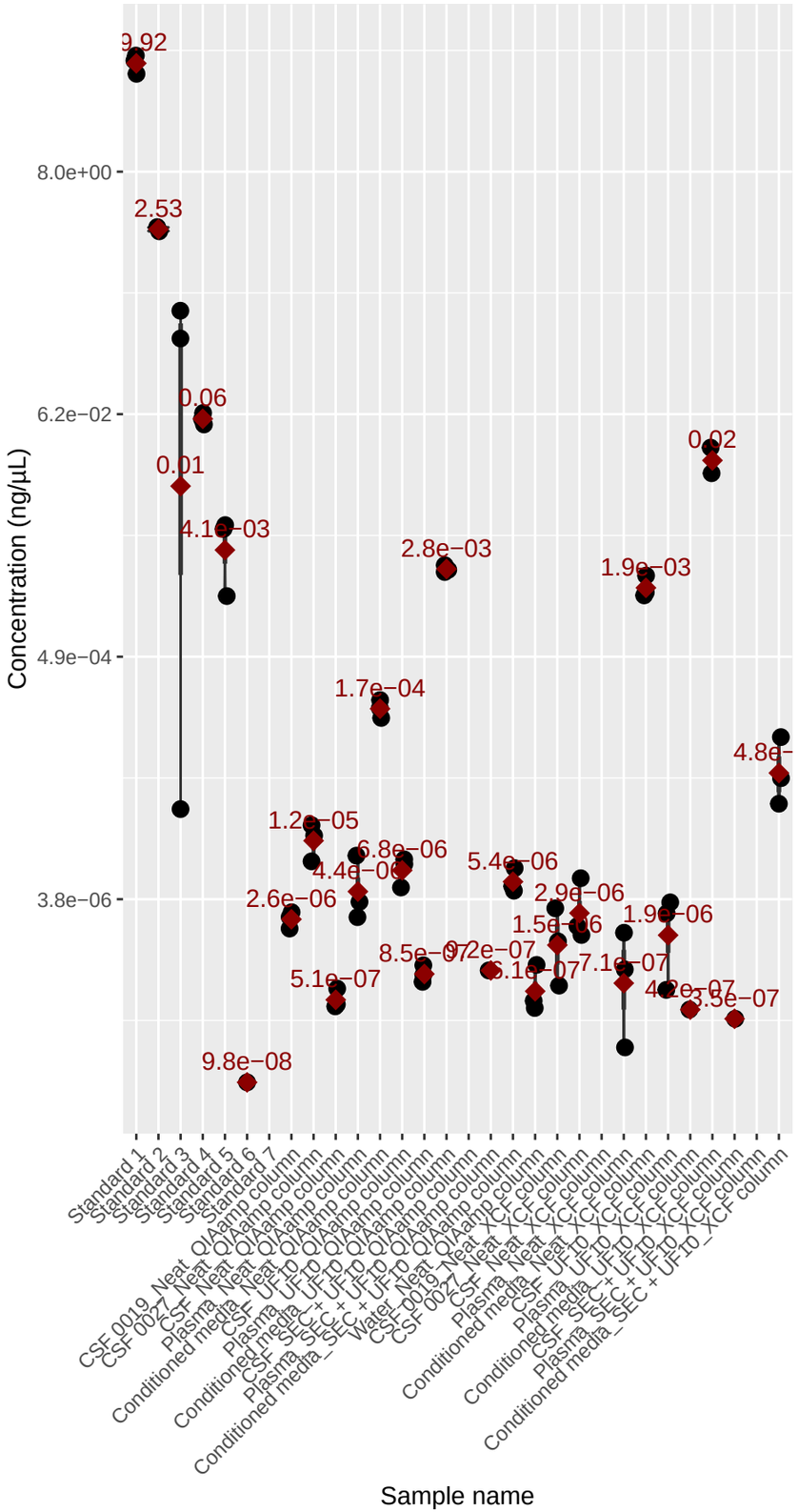
Sample type

Concentration

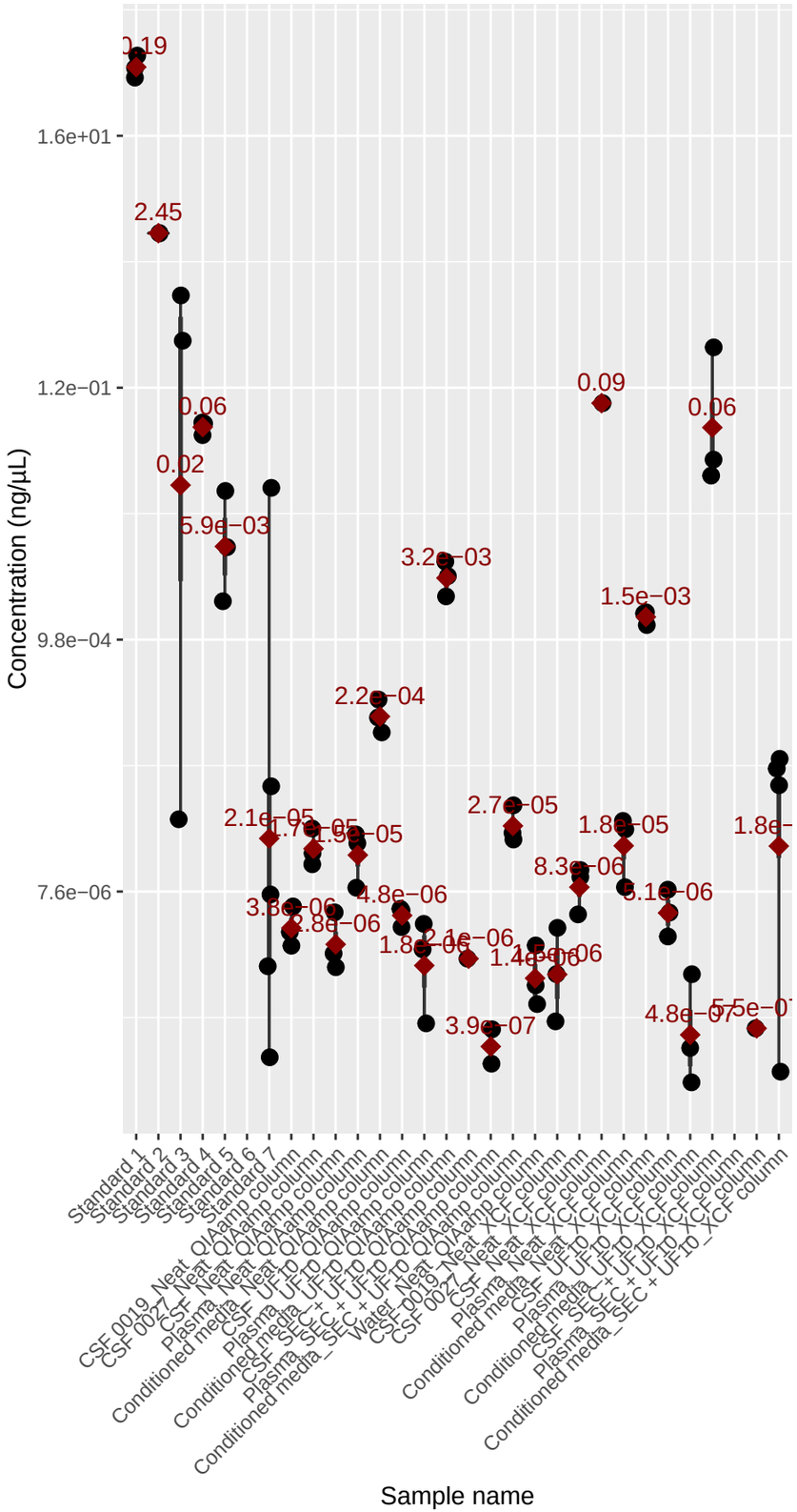
IPC



Large



Small



Concentration

Concentration (ng/µL)

2.2e+12
1.7e+07
1.3e+02
9.8e−04

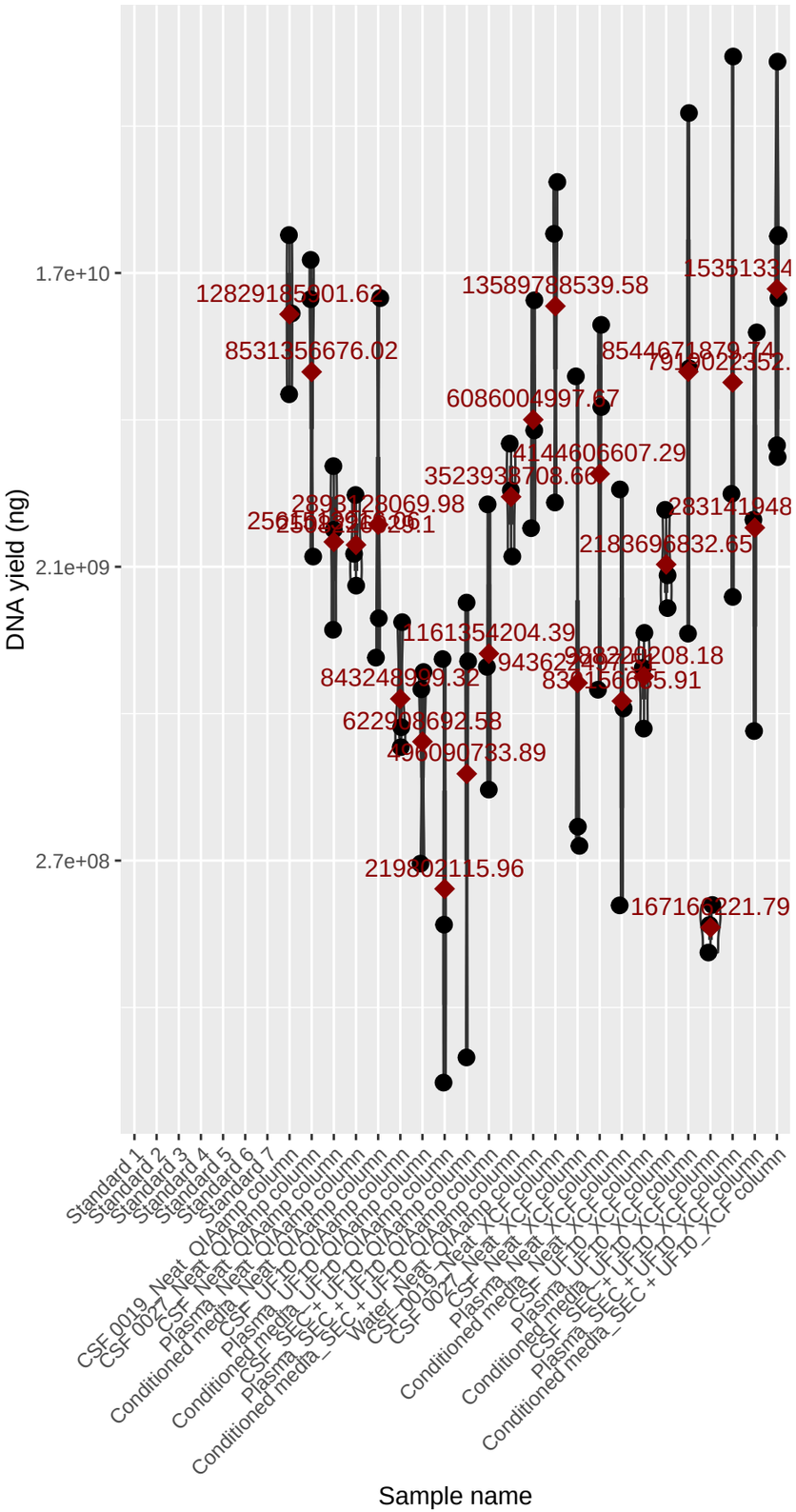
IPC
Large
Small

Target

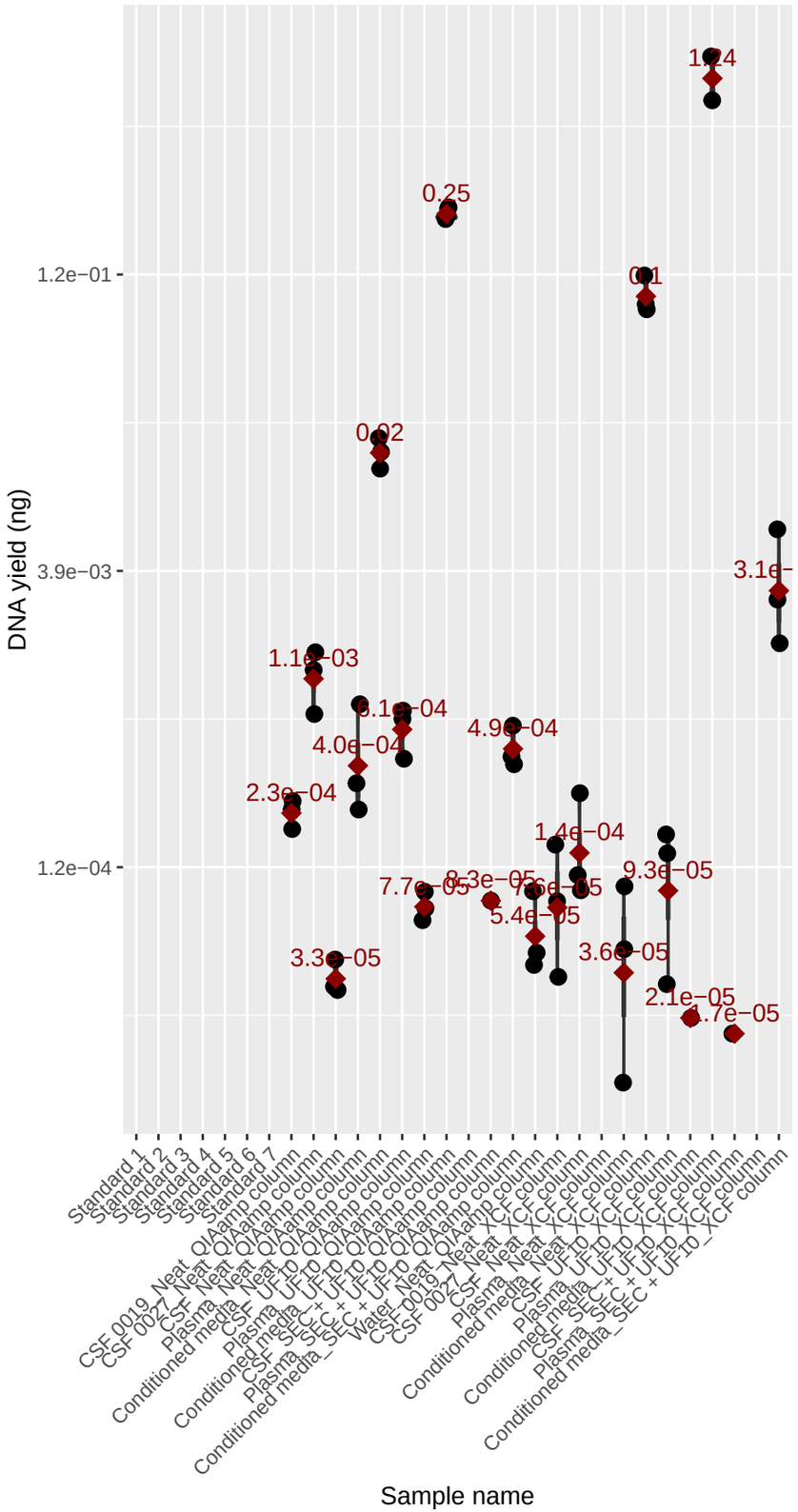
Sample type
Sample
Standard

DNA yield

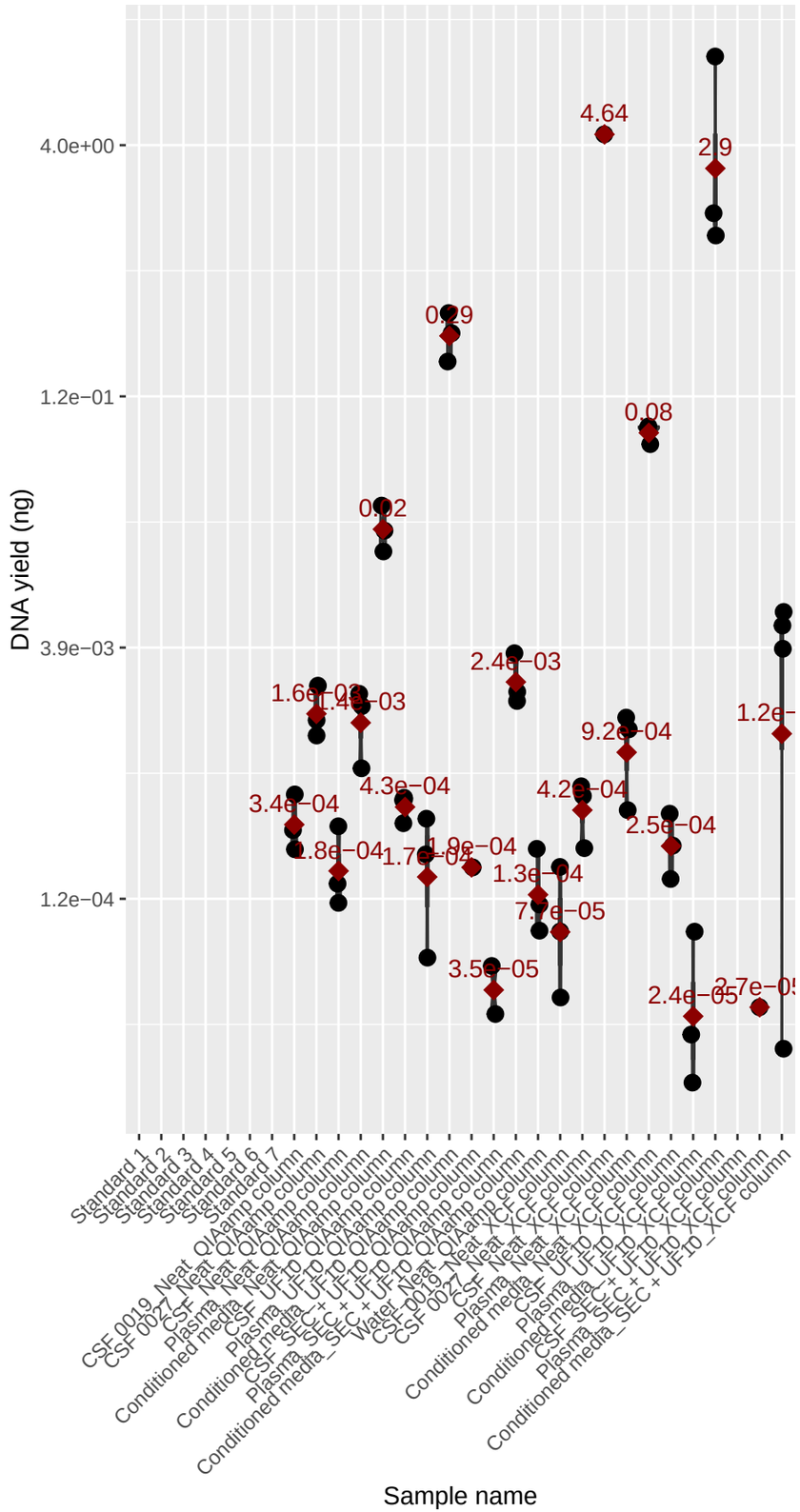
IPC



Large



Small



DNA yield

DNA yield (ng)

5.4e+08
1.3e+05
3.2e+01
7.8e−03

IPC
Large
Small

Target

Concentration (ng/µL)

IPC

Large

Small

QIAamp column

XCF column

Neat

UF10

SEC + UF10

Concentration (ng/µL)

Source

Water

CSF 0019

CSF 0027

CSF

Plasma

Conditioned media

DNA yield (ng)

IPC

Large

Small

QIAamp column | XCF column | Neat | UF10 | SEC + UF10

DNA yield (ng)

Source

Water | CSF 0019 | CSF 0027 | CSF | Plasma | Conditioned media