FIG. 1A

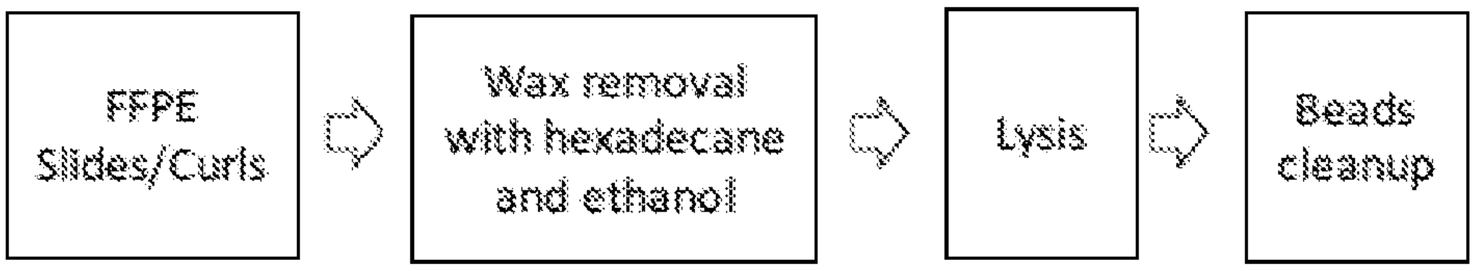

Workflow of DNA+RNA Extraction from FFPE Biological Sample
FFPE Slides/Curls
Wax removal with hexadecane and ethanol
Lysis
Beads cleanup

FIG. 1B

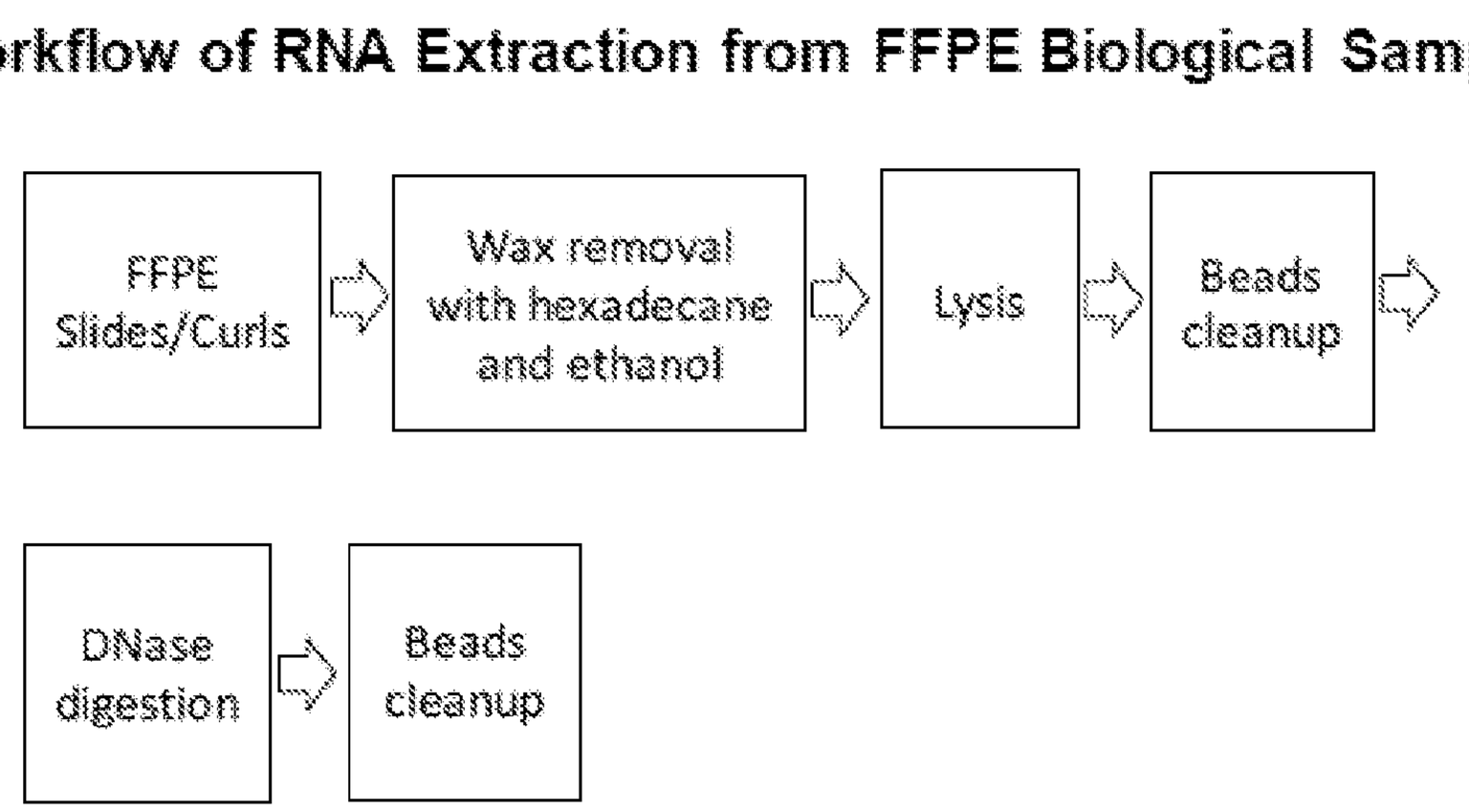

Workflow of RNA Extraction from FFPE Biological Sample
FFPE Slides/Curls
Wax removal with hexadecane and ethanol
Lysis
Beads cleanup
DNase digestion
Beads cleanup

FIG. 2

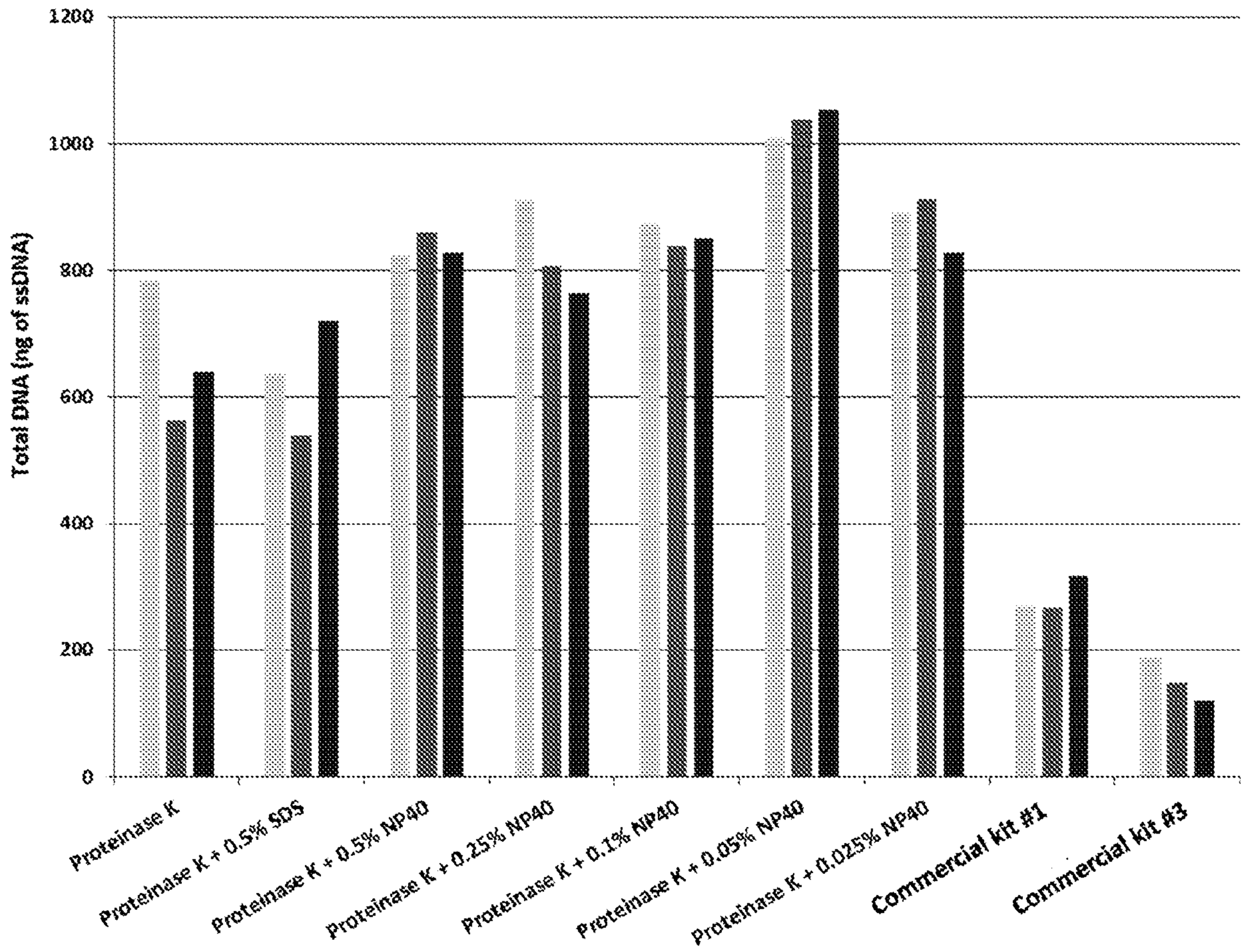

1200
1000
800
600
400
200
0
Total DNA (ng of ssDNA)
Proteinase K
Proteinase K + 0.5% SDS
Proteinase K + 0.5% NP40
Proteinase K + 0.25% NP40
Proteinase K + 0.1% NP40
Proteinase K + 0.05% NP40
Proteinase K + 0.025% NP40
Commercial kit #1
Commercial kit #3

FIG. 3A

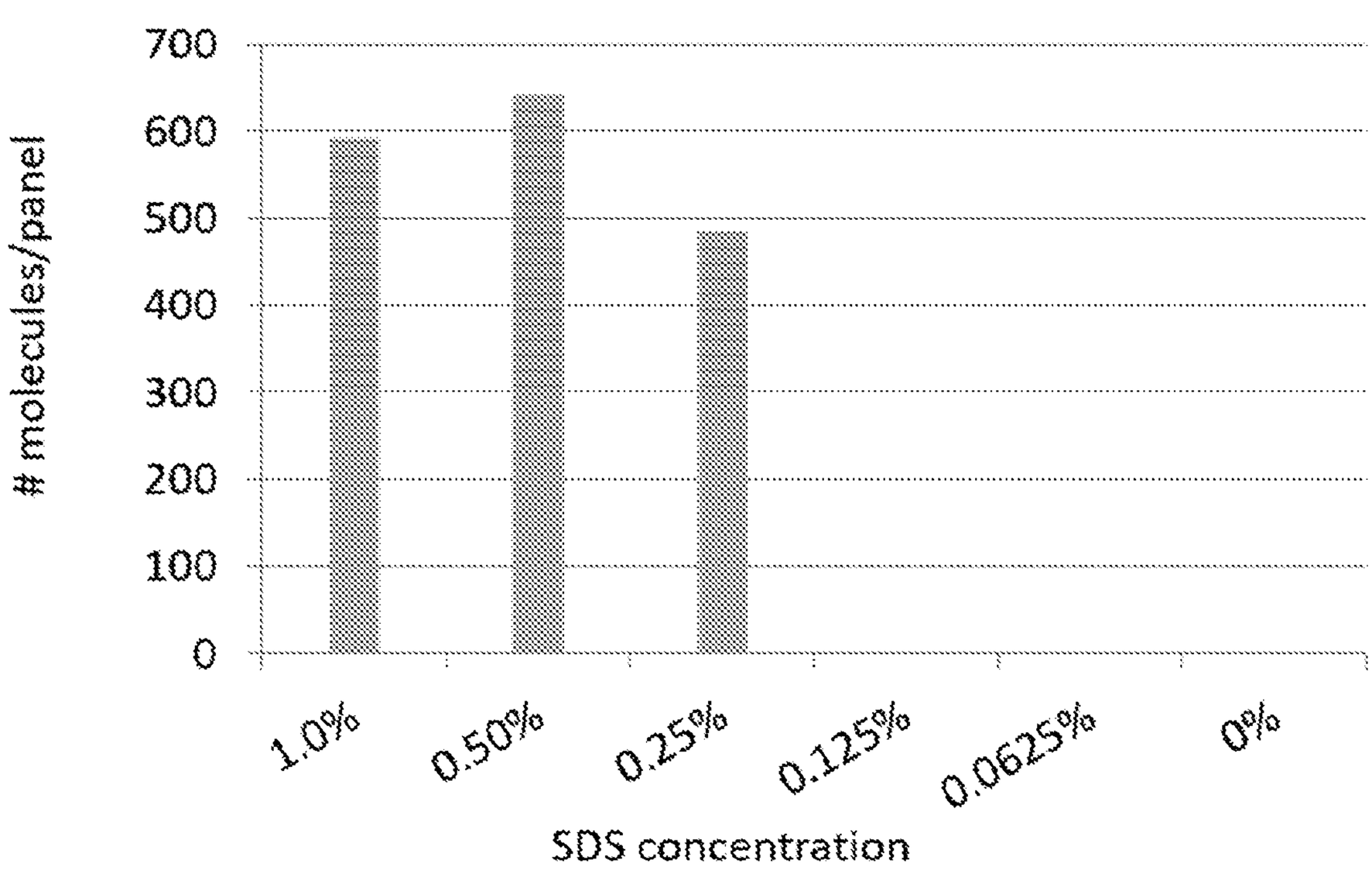


FIG. 3B

SDS concentration in lysis reaction	0.0%	0.2%	0.4%	0.6%	0.8%	1.0%
Nanodrop (ng/ul)	31.2	29.0	29.6	29.6	29.2	27.5
qPCR (ng/ul)	21.8	21.3	23.0	23.2	23.1	26.0

FIG. 4

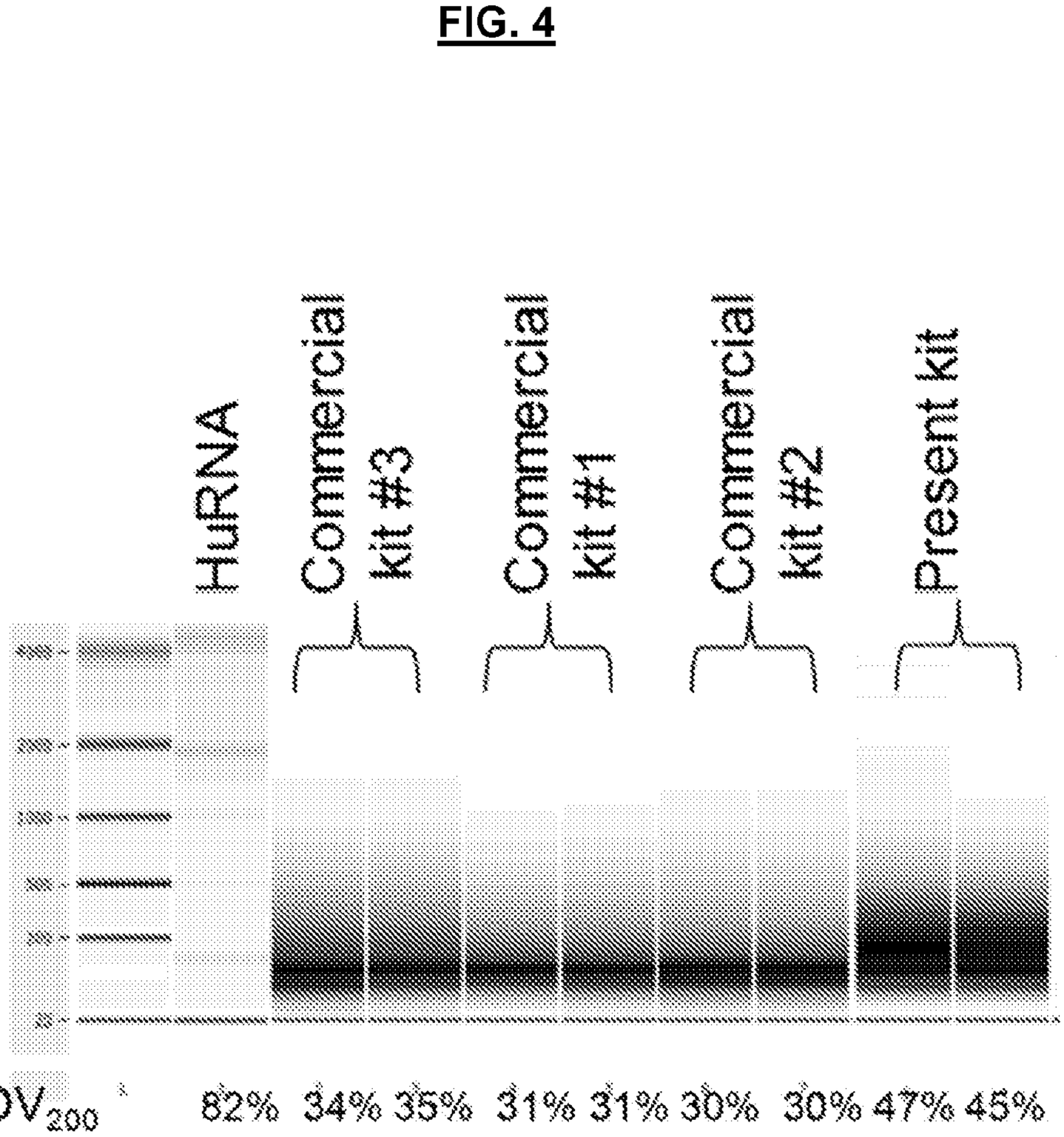

HuRNA
Commercial kit #3
Commercial kit #1
Commercial kit #2
Present kit
400
300
200
100
50
DV200
82% 34% 35% 31% 31% 30% 30% 47% 45%

FIG. 5A

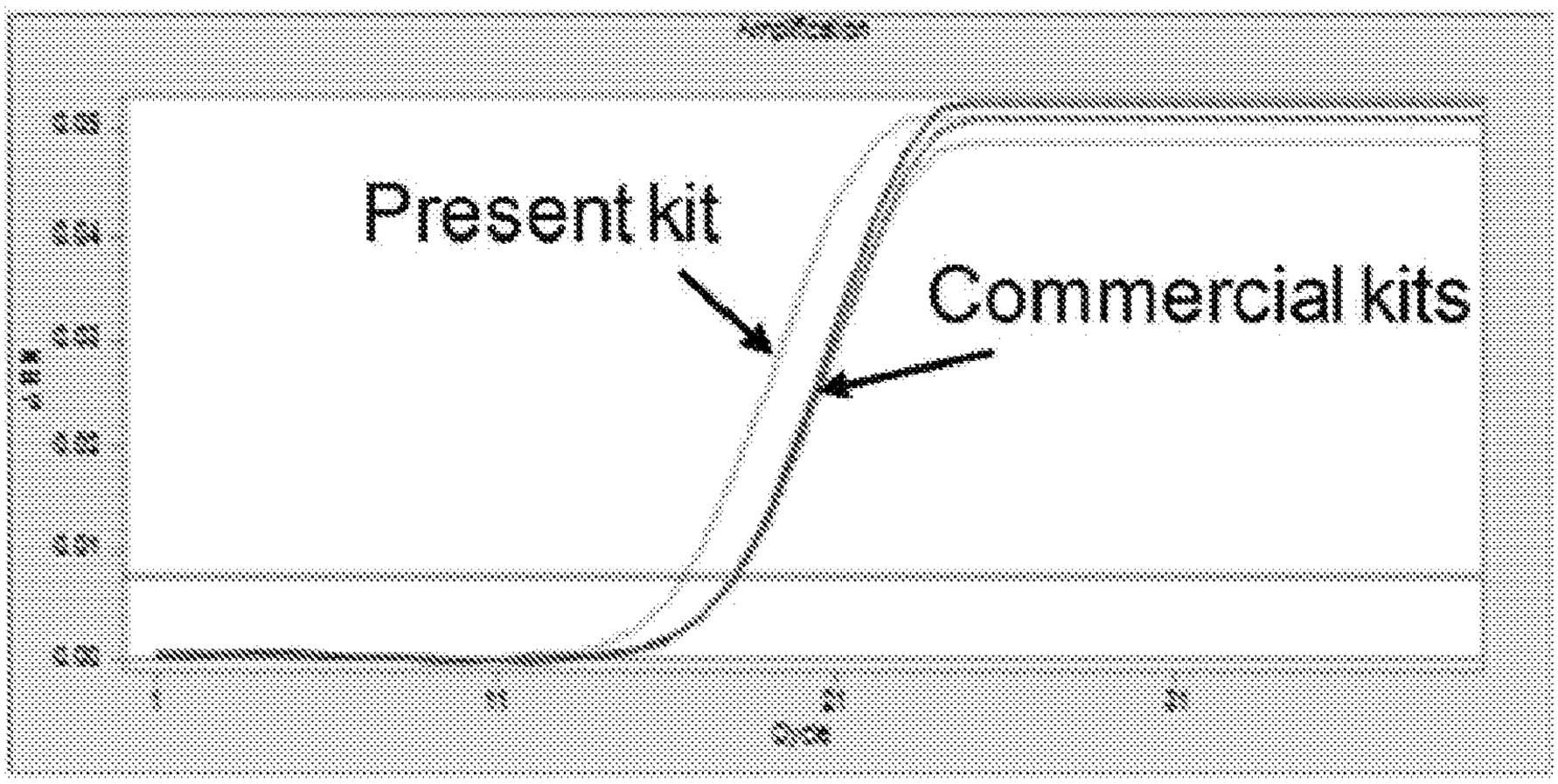


FIG. 5B

RNA Extraction Kit	Total Assays Detected Ct<28	%	Total Assays Detected Cq<22	%
Commercial kit #2	145	85.3%	78	45.9%
Commercial kit #1	146	85.9%	80	47.1%
Commercial kit #3	141	82.9%	74	43.5%
Present kit	156	91.8%	104	61.2%

FIG. 6

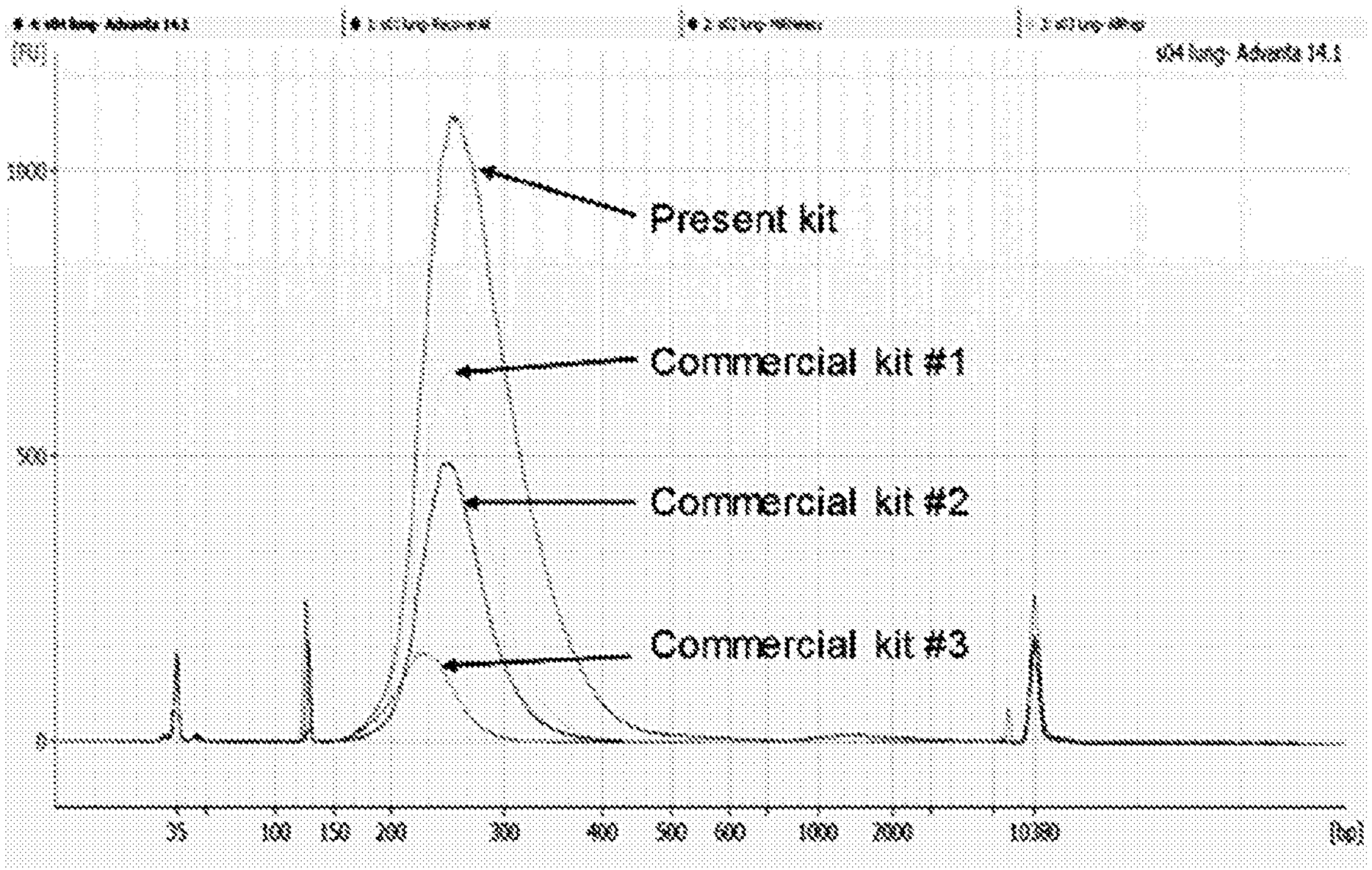

Present kit
Commercial kit #1
Commercial kit #2
Commercial kit #3
35
100
150
200
300
400
500
600
1000
2000
10000
(bp)

FIG. 7A

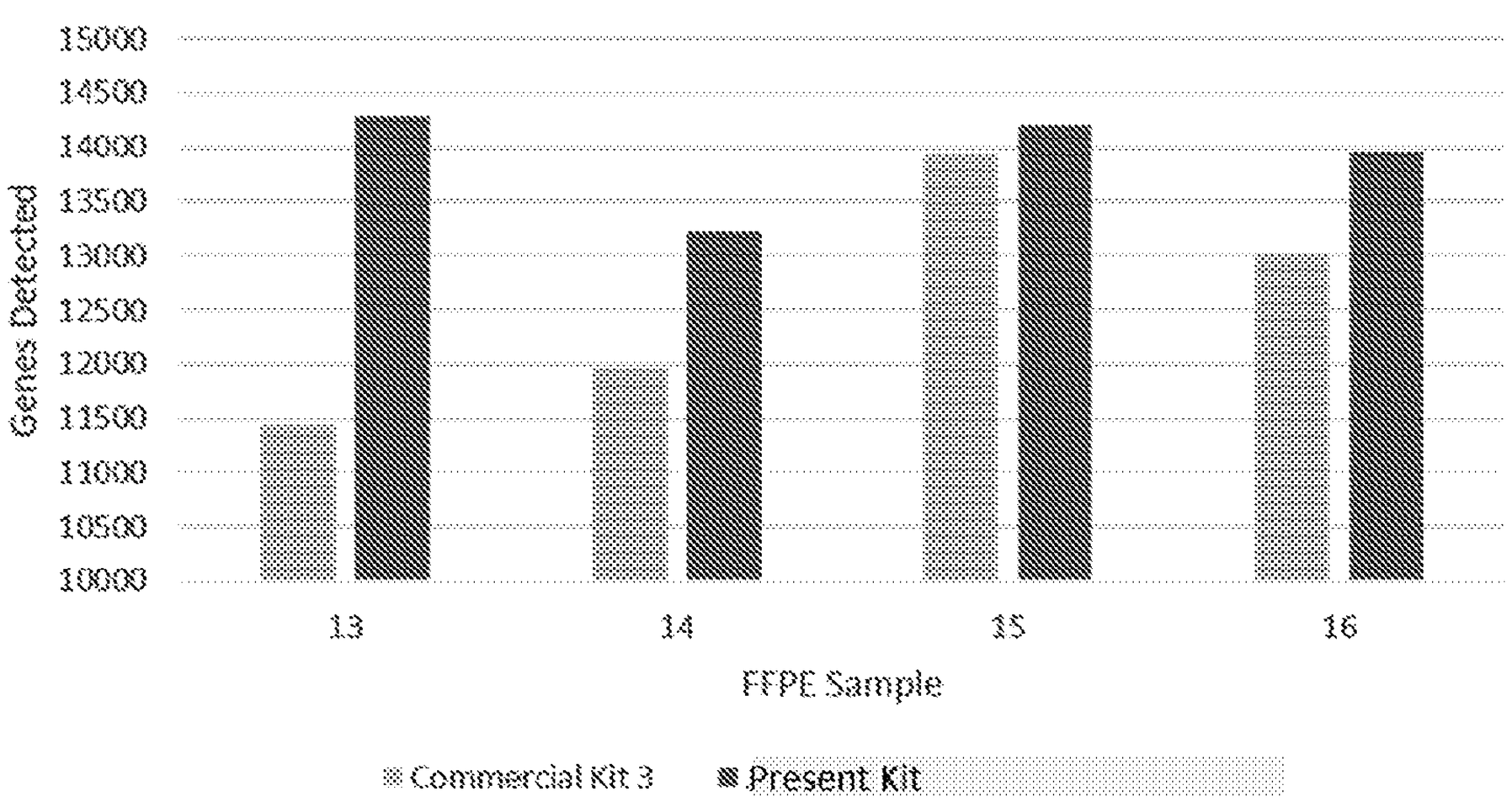

Genes Detected
15000
14500
14000
13500
13000
12500
12000
11500
11000
10500
10000
Genes Detected
13
14
15
16
FFPE Sample
Commercial Kit 3
Present Kit

FIG. 7B

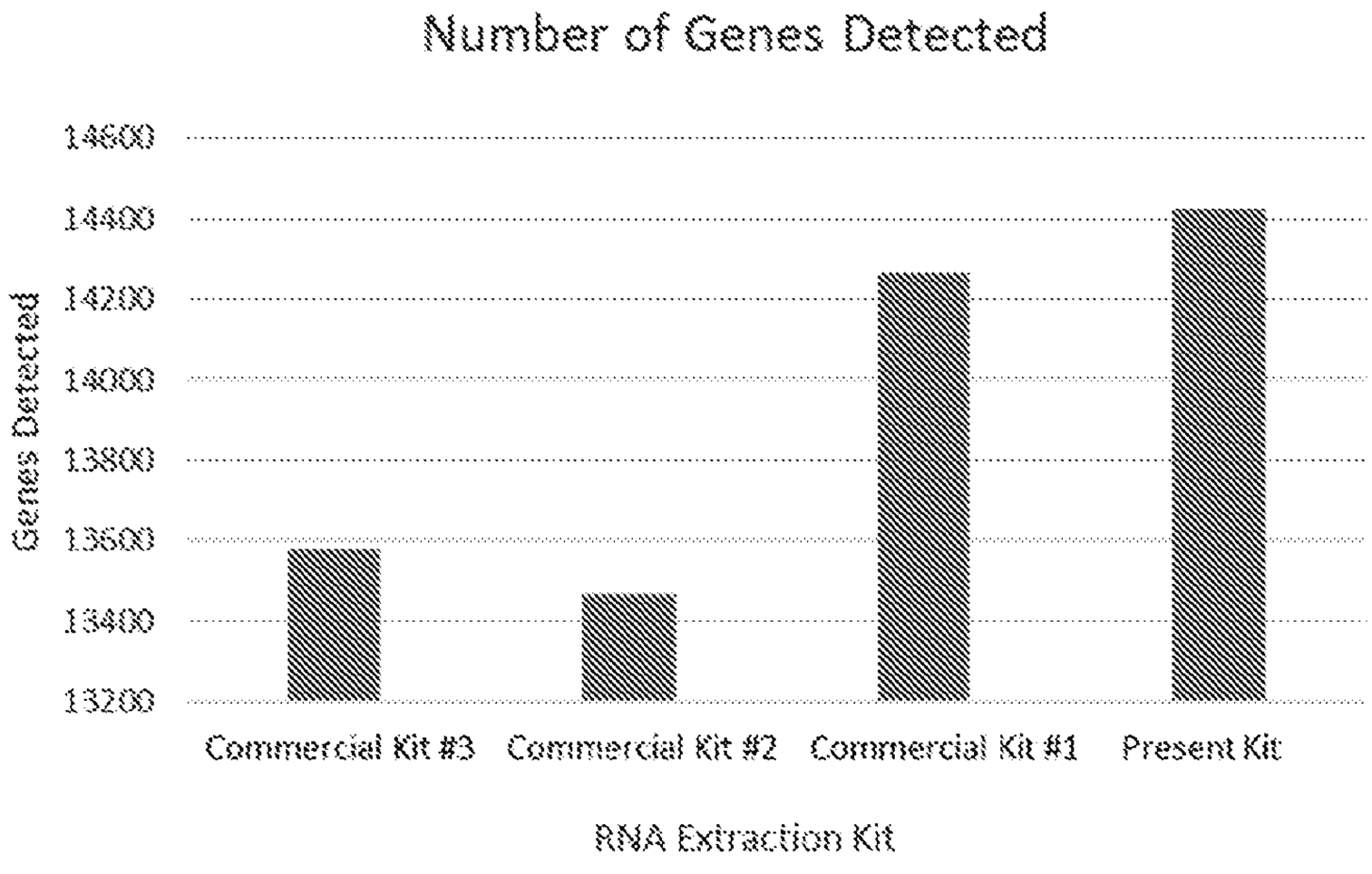

Number of Genes Detected
14600
14400
14200
14000
13800
13600
13400
13200
Genes Detected
Commercial Kit #3
Commercial Kit #2
Commercial Kit #1
Present Kit
RNA Extraction Kit

FIG. 8A

Operator	Minimum Yield (ng/uL)	Result
1	30.4	Pass
2	60.0	Pass

FIG. 8B

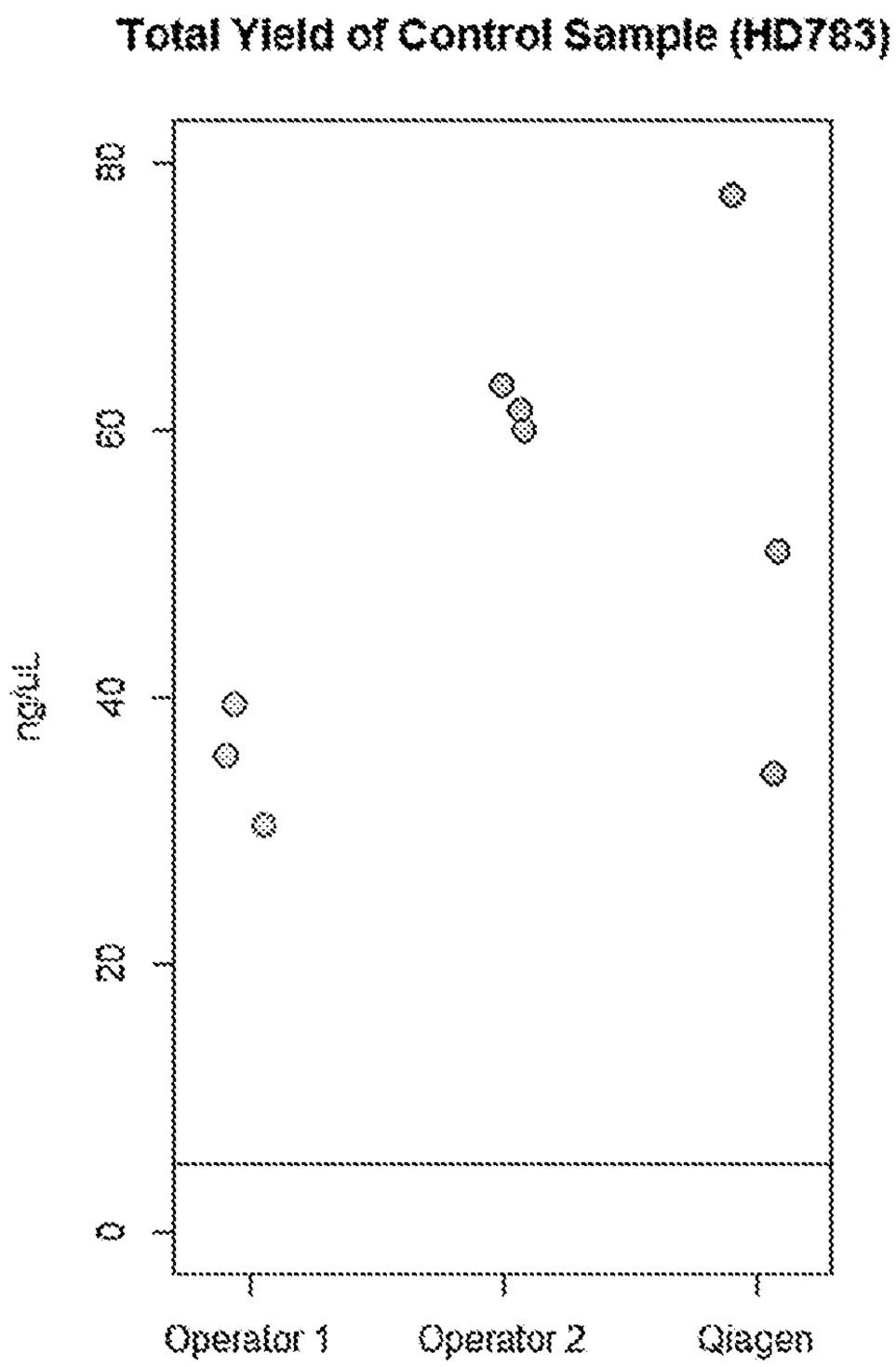


FIG. 8C

	DV200				
	Fluidigm		Qiagen		Result
	Operator 1	Operator 2	Operator 1	Operator 2	
t-test p-value	1.60E-11	2.20E-16	1	1	Pass
WSR p-value	7.67E-08	1.82E-12	1	1	Pass

FIG. 8D

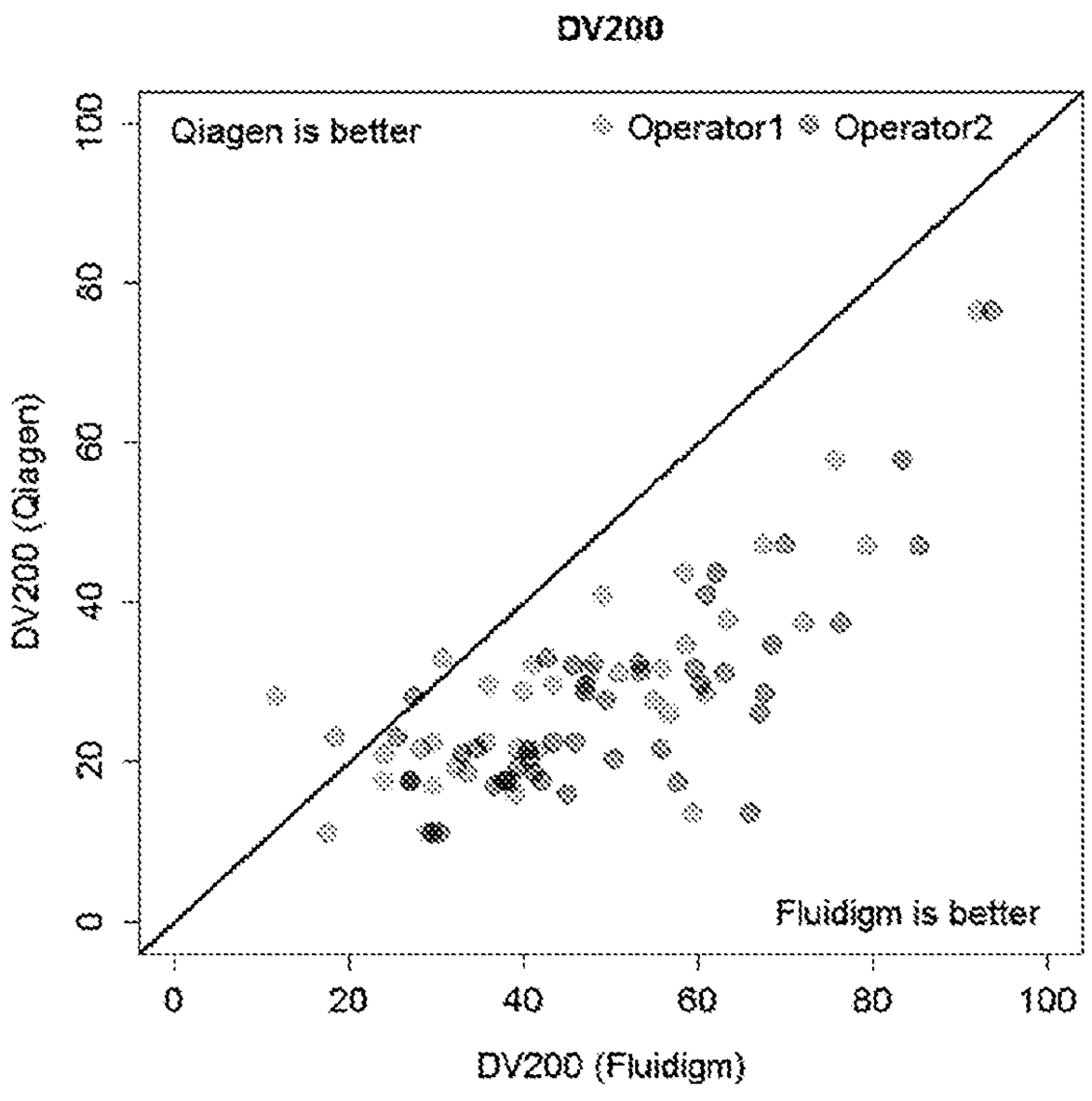


FIG. 8E

	Cq < 22				
	Fluidigm		Qiagen		Result
	Operator 1	Operator 2	Operator 1	Operator 2	
t-test p-value	1.06E-09	9.92E-13	1	1	Pass
WSR p-value	4.53E-09	3.00E-11	1	1	Pass

	Cq < 28				
	Fluidigm		Qiagen		Result
	Operator 1	Operator 2	Operator 1	Operator 2	
t-test p-value	5.26e-06	3.029e-11	1	1	Pass
WSR p-value	2.317e-07	2.327e-08	1	1	Pass

FIG. 8F

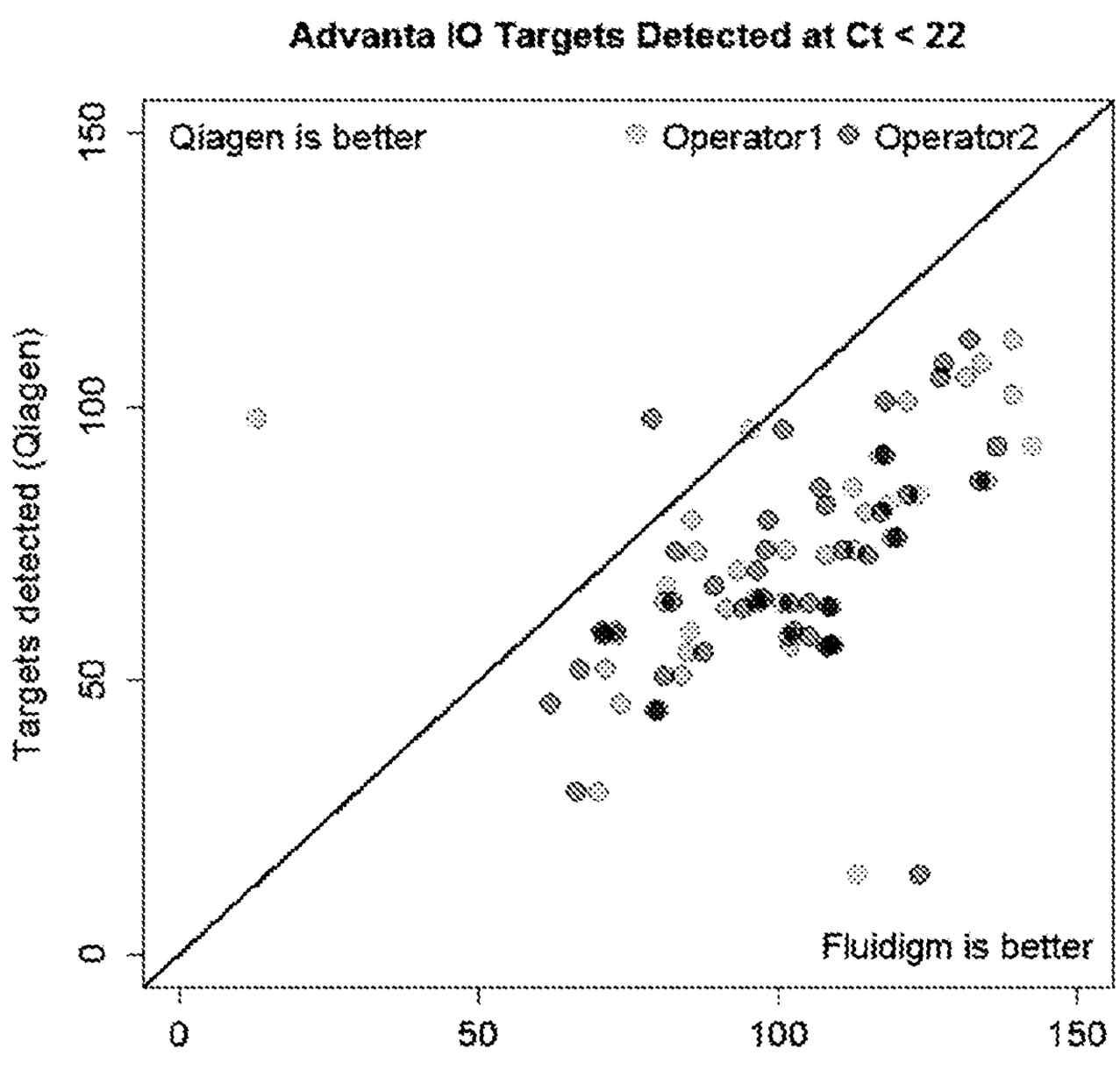


FIG. 9A

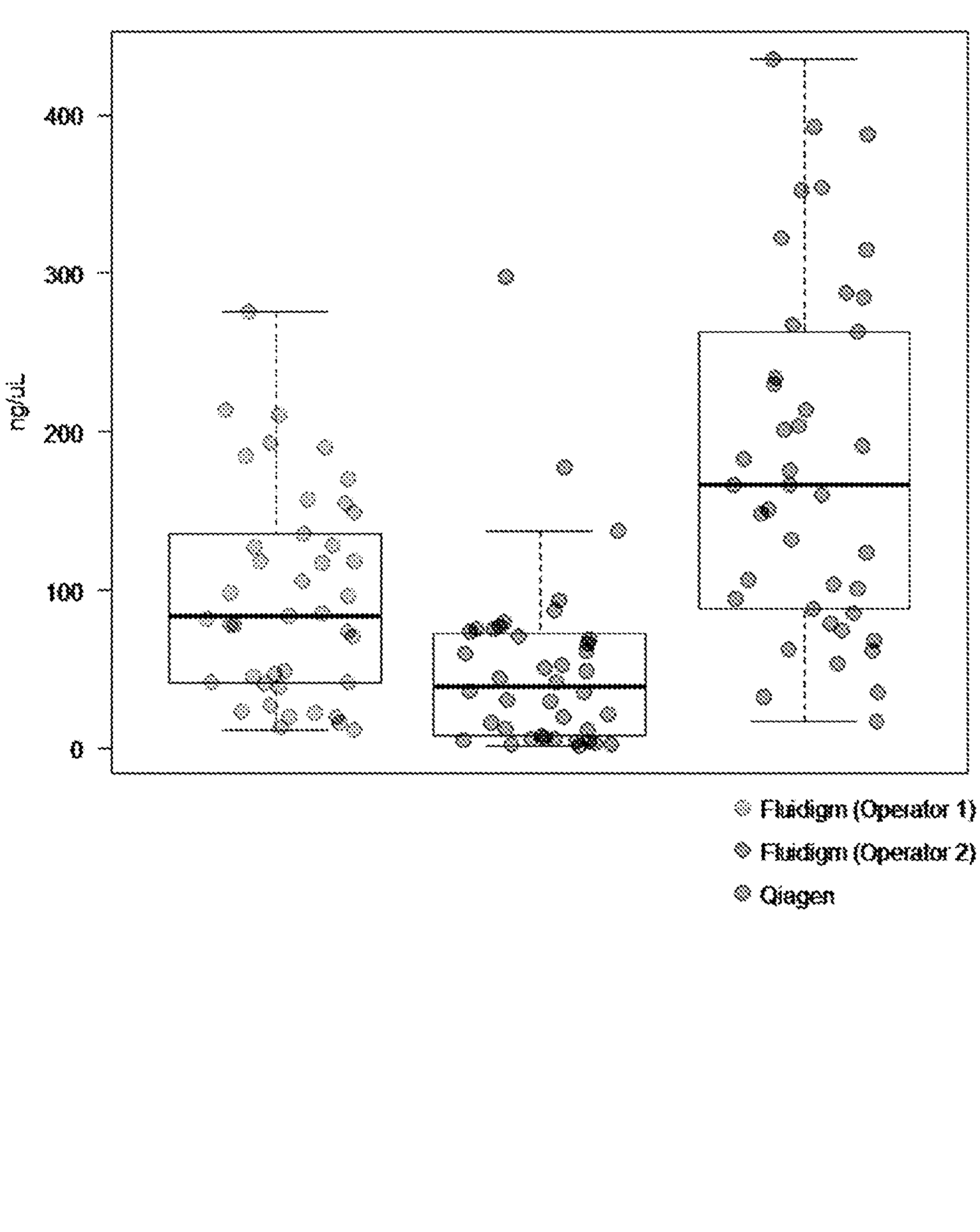

Total RNA Yield
ng/uL
400
300
200
100
0
Fluidigm (Operator 1)
Fluidigm (Operator 2)
Qiagen

FIG. 9C

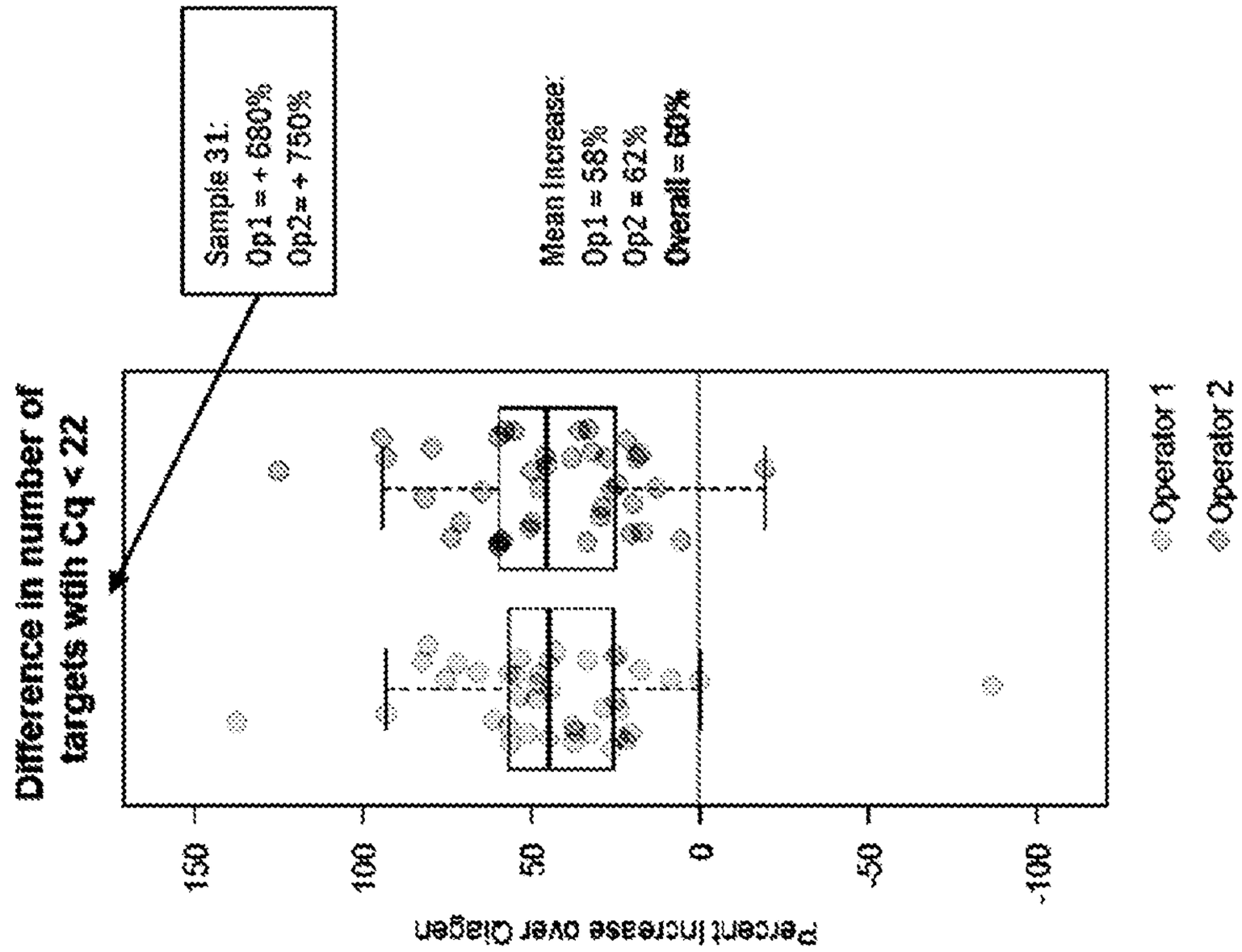
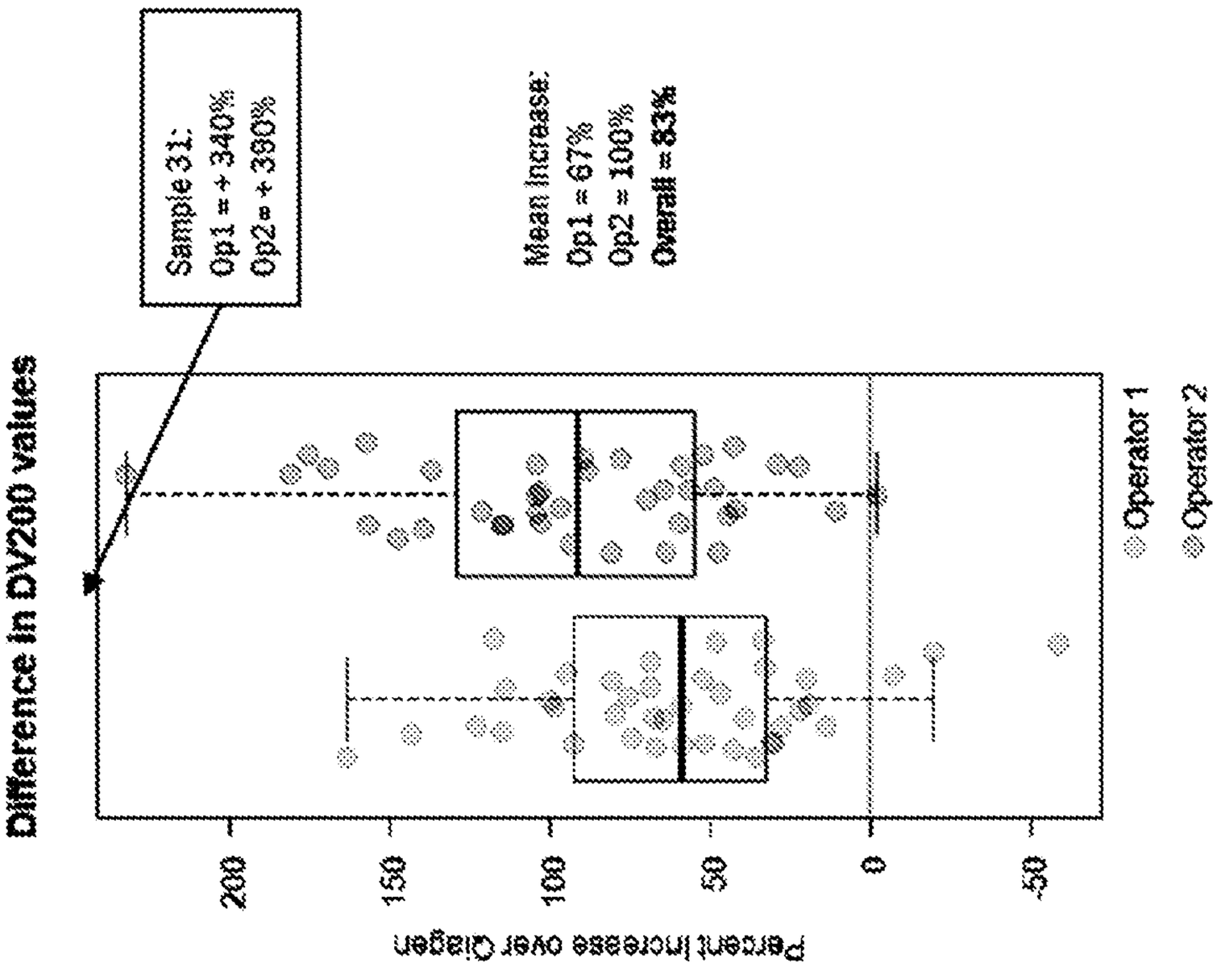

Difference in number of targets with Cq < 22
Sample 31:
Op1 = +680%
Op2= +750%
Mean increase:
Op1 = 58%
Op2 = 62%
Overall = 60%
Percent increase over Diagen
150
100
50
0
-50
-100
Operator 1
Operator 2

FIG. 9B


Difference in DV200 values
Sample 31:
Op1 = +340%
Op2= +390%
Mean increase:
Op1 = 67%
Op2 = 100%
Overall = 83%
Percent increase over Diagen
200
150
100
50
0
-50
Operator 1
Operator 2