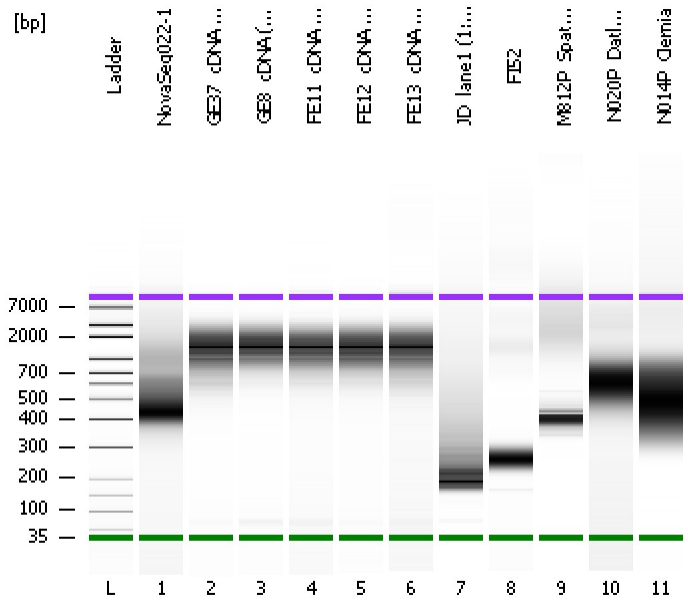
Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

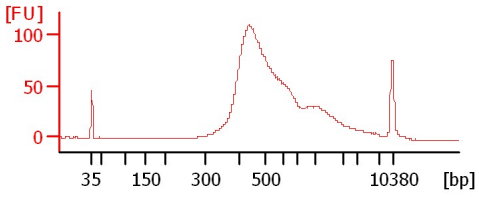
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

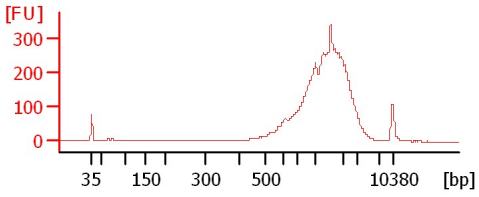
Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:

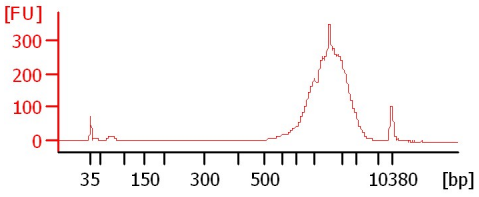
NovaSeq022-1



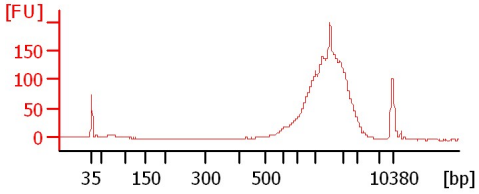
GE37_cDNA (1:10)



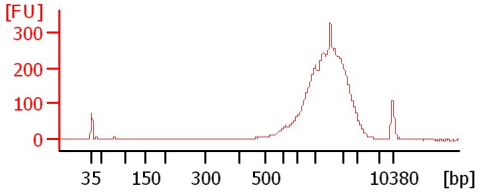
GE8_cDNA (1:2)



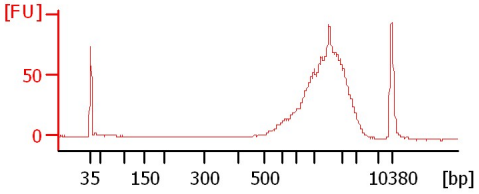
FE11_cDNA (1:5)



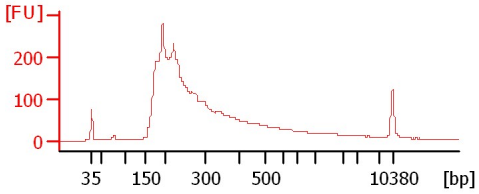
FE12_cDNA (1:10)



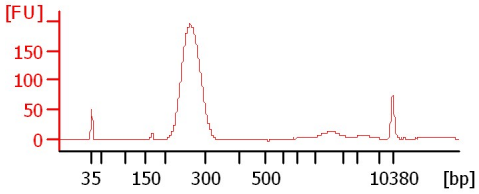
FE13_cDNA (1:10)



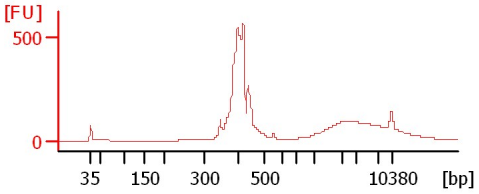
JD_lane1 (1:20)



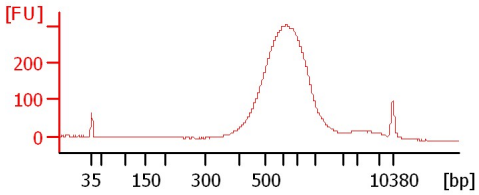
FI52



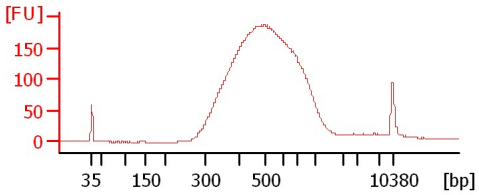
M812P_Spatz (1:3)



N020P_Datlof (1:5)



N014P_Ciernia



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NovaSeq022-1		☐	✔			
GE37_cDNA (1:10)		☐	✔			
GE8_cDNA (1:2)		☐	✔			
FE11_cDNA (1:5)		☐	✔			
FE12_cDNA (1:10)		☐	✔			
FE13_cDNA (1:10)		☐	✔			
JD_lane1 (1:20)		☐	✔			
FI52		☐	✔			
M812P_Spatz (1:3)		☐	✔			
N020P_Datlof (1:5)		☐	✔			
N014P_Ciernia		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/µl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/µl] : 125
Upper Marker Concentration [pg/µl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

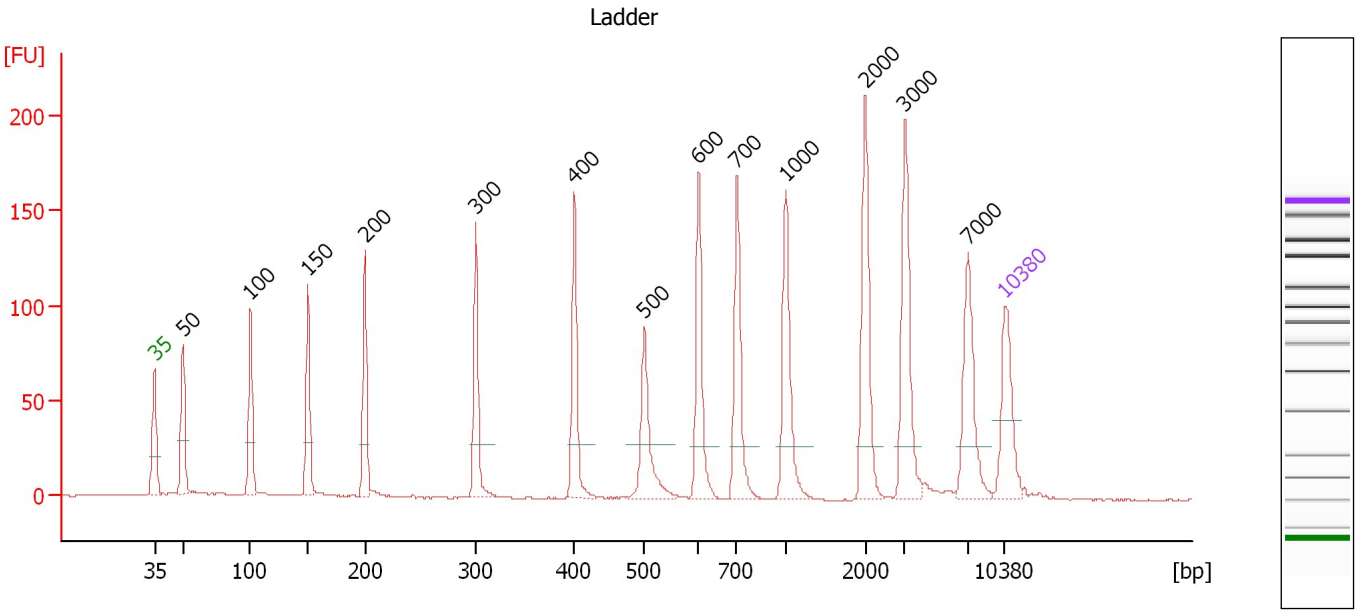
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

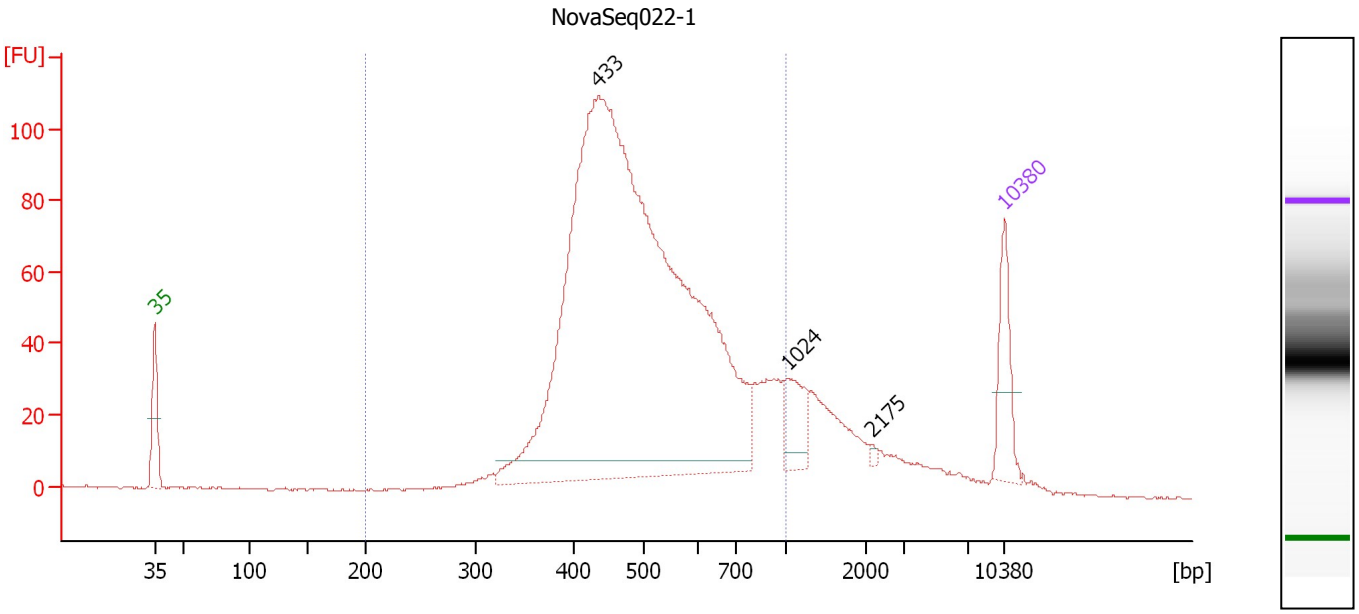
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		35	125.00	5,411.3	Lower Marker	43.00
2		50	150.00	4,545.5	Ladder Peak	45.32
3		100	150.00	2,272.7	Ladder Peak	50.88
4		150	150.00	1,515.2	Ladder Peak	55.61
5		200	150.00	1,136.4	Ladder Peak	60.34
6		300	150.00	757.6	Ladder Peak	69.45
7		400	150.00	568.2	Ladder Peak	77.58
8		500	150.00	454.5	Ladder Peak	83.30
9		600	150.00	378.8	Ladder Peak	87.78
10		700	150.00	324.7	Ladder Peak	90.93
11		1,000	150.00	227.3	Ladder Peak	94.97
12		2,000	150.00	113.6	Ladder Peak	101.52
13		3,000	150.00	75.8	Ladder Peak	104.77
14		7,000	150.00	32.5	Ladder Peak	110.00
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq022-1

Number of peaks found:	3	Corr. Area 1:	1,587.3
Noise:	0.3		

Peak table for sample 1 : NovaSeq022-1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	433	2,205.47	7,713.0		79.48
3	1,024	69.25	102.4		95.13
4	2,175	3.85	2.7		102.09
5	10,380	75.00	10.9	Upper Marker	113.00

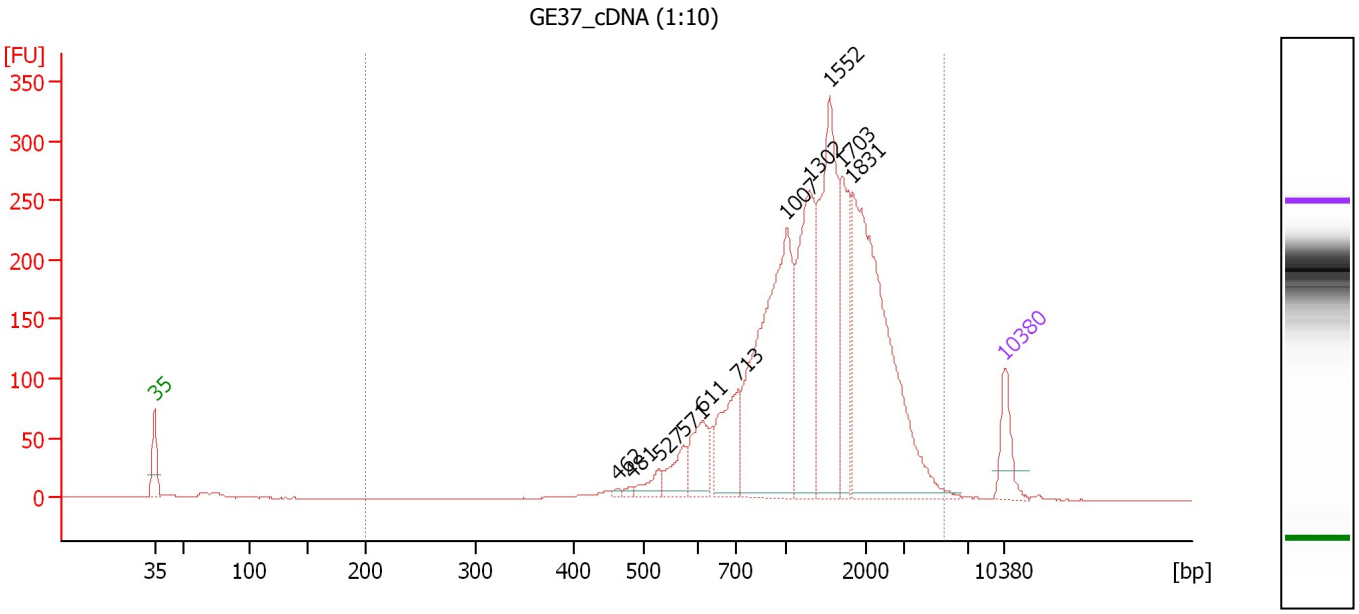
Region table for sample 1 : NovaSeq022-1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	521	2,425.23	1,587.3	7,618.7	86	26.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : GE37_cDNA (1:10)

Number of peaks found:	11	Corr. Area 1:	3,412.1
Noise:	0.3		

Peak table for sample 2 : GE37_cDNA (1:10)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	462	7.04	23.1		81.15
3	481	10.15	31.9		82.24
4	527	41.01	117.9		84.51
5	571	73.94	196.1		86.50
6	611	115.63	286.6		88.13
7	713	181.04	384.8		91.10
8	1,007	667.35	1,004.0		95.02
9	1,302	381.69	444.2		96.95
10	1,552	450.95	440.4		98.58
11	1,703	203.47	181.1		99.57
12	1,831	721.81	597.2		100.42
13	10,380	75.00	10.9	Upper Marker	113.00

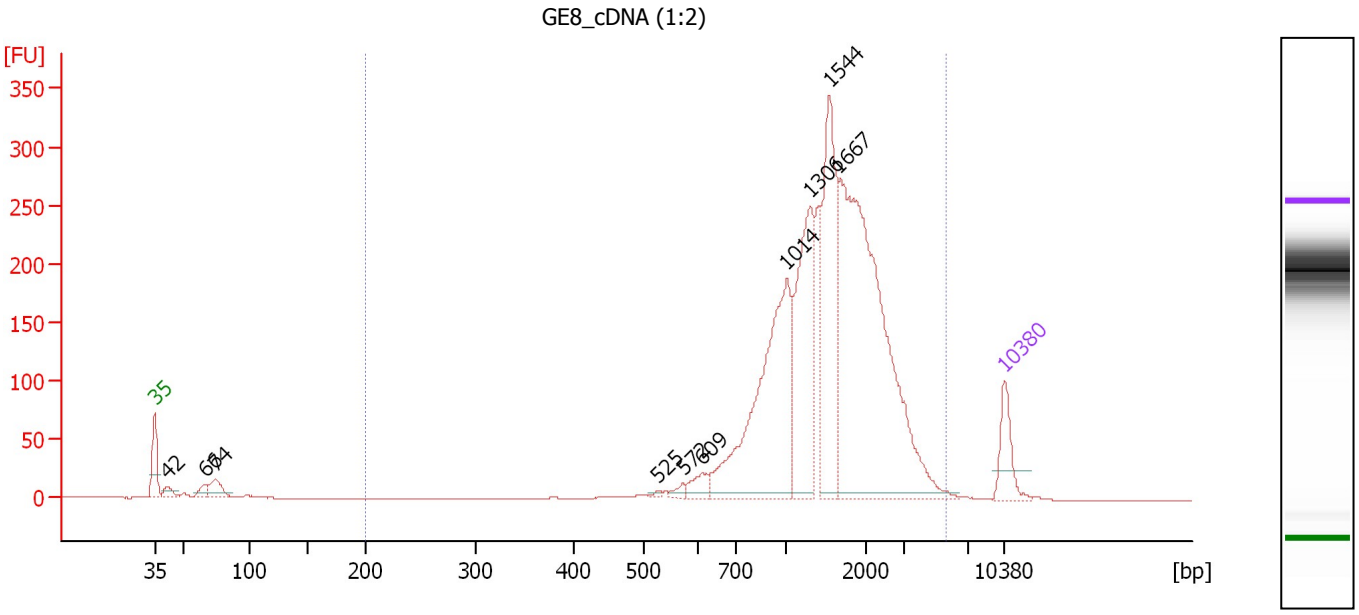
Region table for sample 2 : GE37_cDNA (1:10)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	5,432	1,496	2,963.15	3,412.1	3,974.1	98	49.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : GE8_cDNA (1:2)

Number of peaks found:	10	Corr. Area 1:	2,859.3
Noise:	0.3		

Peak table for sample 3 : GE8_cDNA (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	42	32.95	1,183.4		44.11
3	66	33.57	767.0		47.13
4	74	60.57	1,232.4		48.04
5	525	6.10	17.6		84.43
6	572	13.72	36.3		86.54
7	609	39.07	97.2		88.05
8	1,014	595.92	890.9		95.06
9	1,306	371.08	430.6		96.97
10	1,544	389.20	381.9		98.54
11	1,667	1,026.02	932.4		99.34
12	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 3 : GE8_cDNA (1:2)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	5,621	1,622	2,580.28	2,859.3	2,949.8	97	43.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

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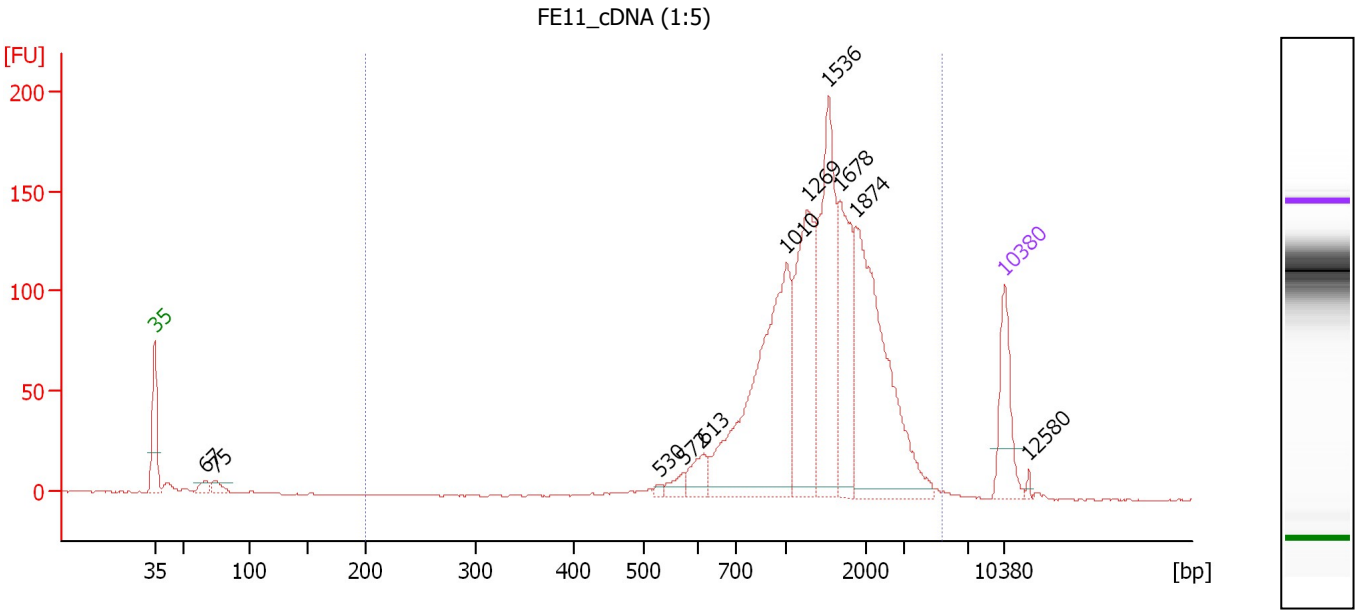

Overall Results for sample 4 : FE11_cDNA (1:5)

Number of peaks found:	11	Corr. Area 1:	1,659.7
Noise:	0.3		

Peak table for sample 4 : FE11_cDNA (1:5)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	67	17.14	389.7		47.17
3	75	19.49	396.3		48.04
4	530	6.10	17.5		84.64
5	572	17.08	45.2		86.54
6	613	36.54	90.3		88.19
7	1,010	392.21	588.3		95.04
8	1,269	222.58	265.7		96.74
9	1,536	254.05	250.5		98.49
10	1,678	150.51	135.9		99.41
11	1,874	333.06	269.2		100.70
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,580	0.00	0.0		114.96

Region table for sample 4 : FE11_cDNA (1:5)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	5,404	1,523	1,440.37	1,659.7	1,774.8	97	43.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

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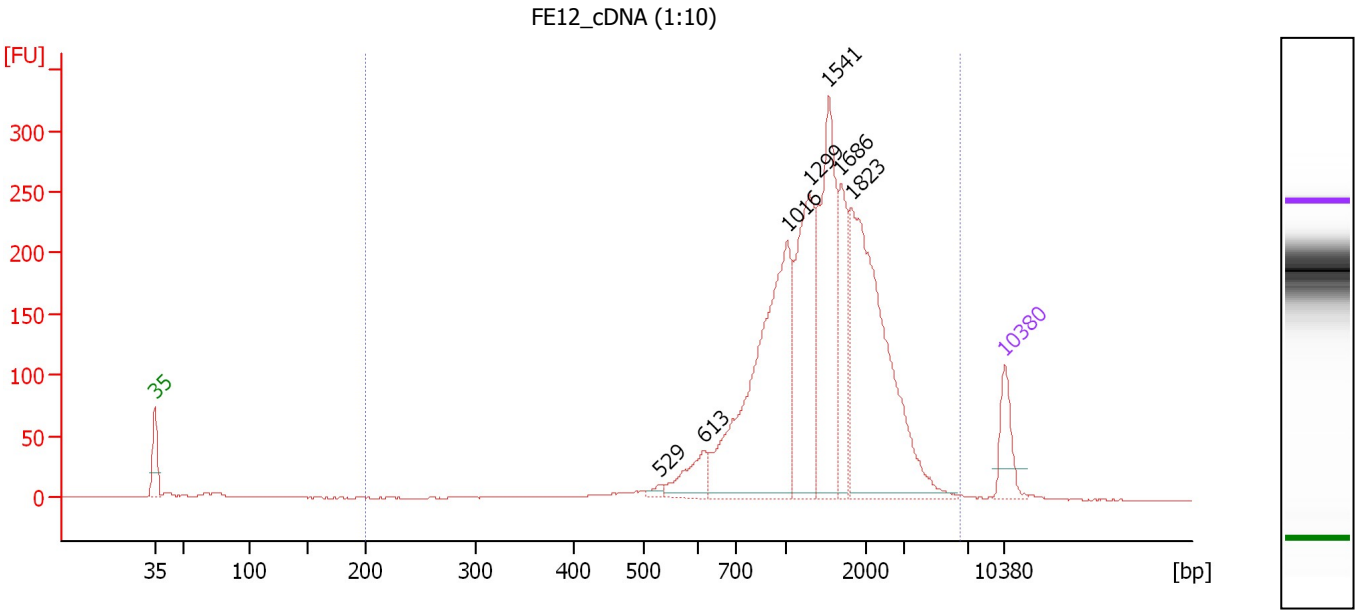

Overall Results for sample 5 : FE12_cDNA (1:10)

Number of peaks found:	7	Corr. Area 1:	2,959.0
Noise:	0.3		

Peak table for sample 5 : FE12_cDNA (1:10)

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	◀	35	125.00	5,411.3	Lower Marker	43.00
2		529	14.20	40.6		84.61
3		613	90.26	222.9		88.20
4		1,016	688.89	1,027.1		95.08
5		1,299	361.35	421.6		96.93
6		1,541	415.75	408.8		98.51
7		1,686	178.15	160.1		99.47
8		1,823	651.59	541.5		100.36
9	▶	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 5 : FE12_cDNA (1:10)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	6,508	1,535	2,499.41	2,959.0	3,143.9	99	47.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

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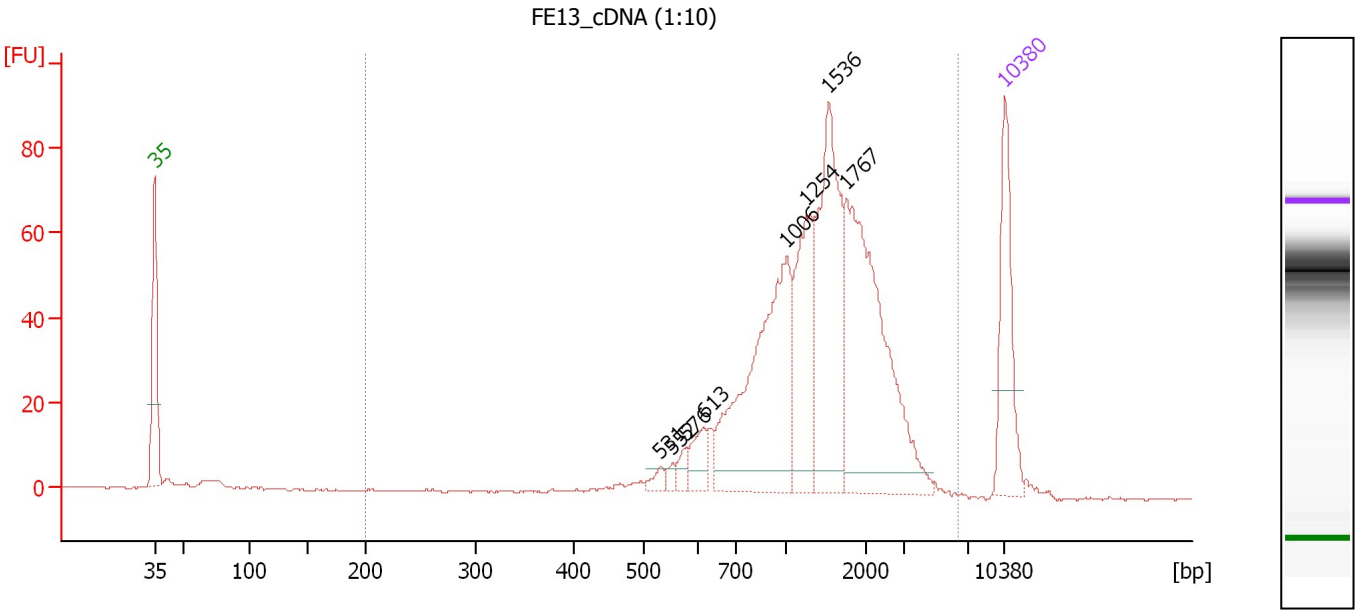


Overall Results for sample 6 : FE13_cDNA (1:10)

Number of peaks found:	8	Corr. Area 1:	851.5
Noise:	0.2		

Peak table for sample 6 : FE13_cDNA (1:10)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	531	8.19	23.4		84.66
3	552	6.16	16.9		85.64
4	576	10.04	26.4		86.72
5	613	25.83	63.8		88.19
6	1,006	220.96	332.7		95.01
7	1,254	103.07	124.5		96.64
8	1,536	172.98	170.7		98.48
9	1,767	229.07	196.4		100.00
10	10,380	75.00	10.9	Upper Marker	113.00

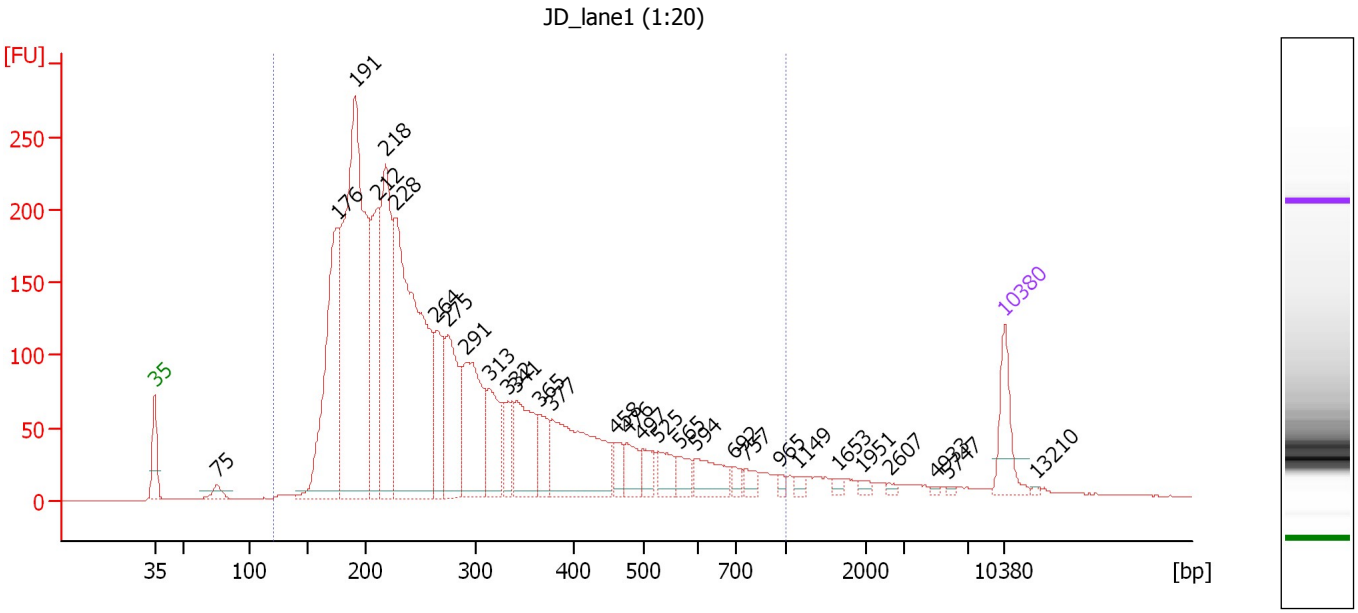
Region table for sample 6 : FE13_cDNA (1:10)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	6,308	1,496	831.37	851.5	1,087.6	98	47.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : JD_lane1 (1:20)

Number of peaks found:	30	Corr. Area 1:	4,480.9
Noise:	0.2		

Peak table for sample 7 : JD_lane1 (1:20)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	75	26.96	541.8		48.14
3	176	528.45	4,557.6		58.04
4	191	1,143.16	9,065.9		59.49
5	212	277.43	1,986.7		61.39
6	218	448.13	3,110.0		62.01
7	228	899.91	5,992.8		62.85
8	264	150.90	864.9		66.20
9	275	226.79	1,250.6		67.15
10	291	286.83	1,491.8		68.66
11	313	125.56	607.8		70.51
12	332	69.25	315.8		72.07
13	341	175.23	778.2		72.80
14	365	74.71	309.9		74.76
15	377	293.60	1,180.1		75.71
16	458	37.19	123.0		80.91
17	476	57.14	181.9		81.91
18	497	37.16	113.2		83.14
19	525	51.12	147.4		84.43
20	565	34.34	92.0		86.22
21	594	68.92	175.8		87.50
22	692	16.42	35.9		90.69
23	757	20.17	40.4		91.70
24	965	8.97	14.1		94.49
25	1,149	10.59	14.0		95.95

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : JD_lane1 (1:20)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,653	9.47	8.7		99.25
27	1,951	8.02	6.2		101.20
28	2,607	5.35	3.1		103.50
29	4,933	3.44	1.1		107.30
30	5,747	2.75	0.7		108.36
31	10,380	75.00	10.9	Upper Marker	113.00
32	13,210	0.00	0.0		115.52

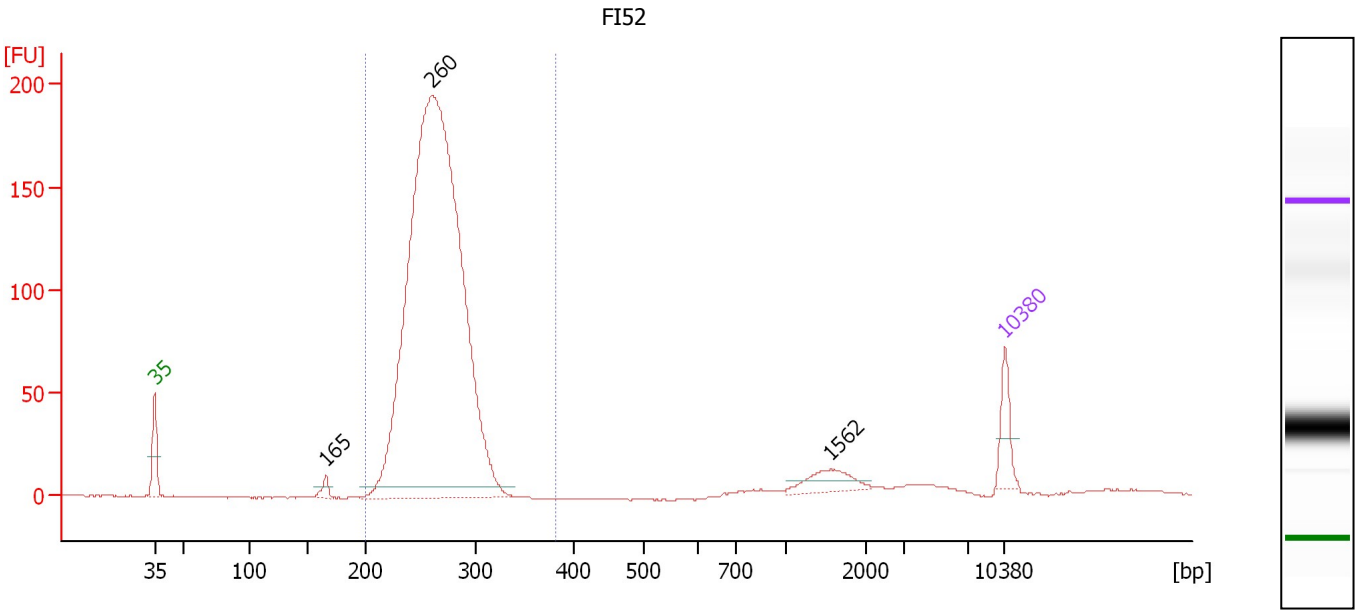
Region table for sample 7 : JD_lane1 (1:20)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
120	1,000	300	5,234.99	4,480.9	32,696.7	93	48.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : FI52

Number of peaks found:	3	Corr. Area 1:	1,458.4
Noise:	0.2		

Peak table for sample 8 : FI52

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	◀	35	125.00	5,411.3	Lower Marker	43.00
2		165	30.43	278.8		57.07
3		260	3,547.94	20,642.7		65.85
4		1,562	74.41	72.2		98.65
5	▶	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 8 : FI52

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	381	264	3,500.04	1,458.4	20,128.1	88	8.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

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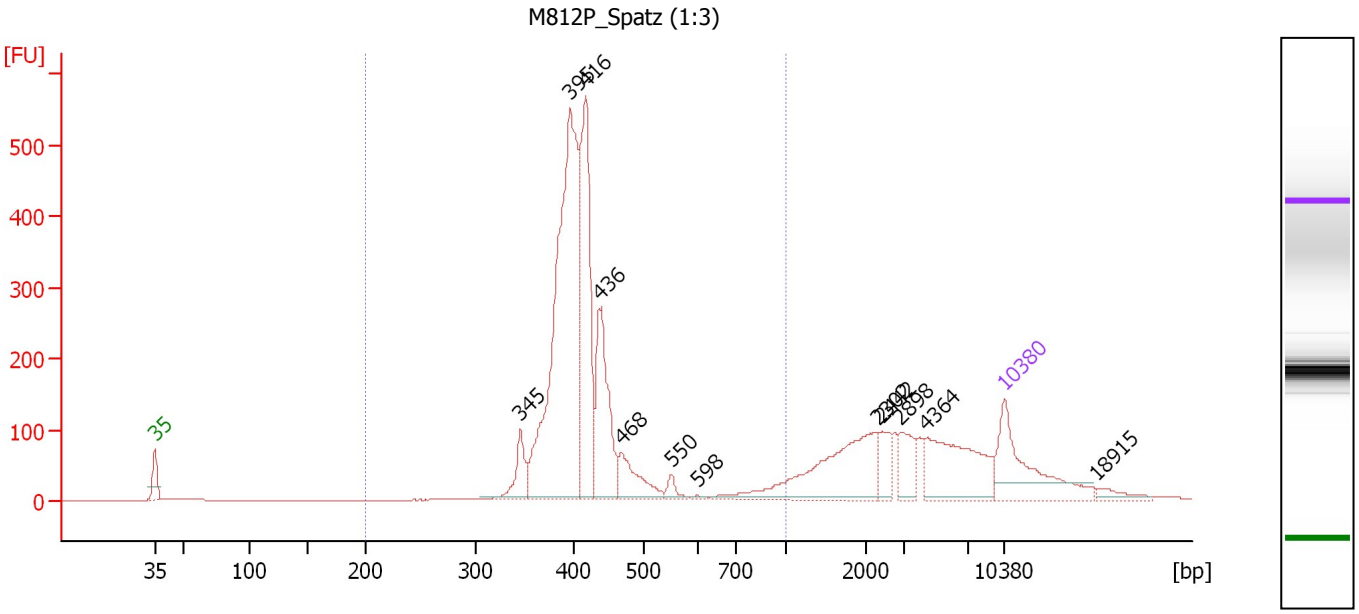
Modified: 2/4/2019 4:45:19 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : M812P_Spatz (1:3)

Number of peaks found:	12	Corr. Area 1:	2,921.7
Noise:	0.2		

Peak table for sample 9 : M812P_Spatz (1:3)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	345	39.32	172.6		73.12
3	395	480.65	1,843.8		77.17
4	416	194.51	708.8		78.48
5	436	118.71	412.7		79.63
6	468	48.70	157.8		81.45
7	550	9.57	26.3		85.56
8	598	2.59	6.6		87.67
9	2,302	120.55	79.4		102.50
10	2,442	22.55	14.0		102.96
11	2,898	28.18	14.7		104.44
12	4,364	90.91	31.6		106.55
13	10,380	75.00	10.9	Upper Marker	113.00
14	18,915	0.00	0.0		120.59

Region table for sample 9 : M812P_Spatz (1:3)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	421	920.38	2,921.7	3,405.9	71	19.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

Created: 2/4/2019 3:59:30 PM
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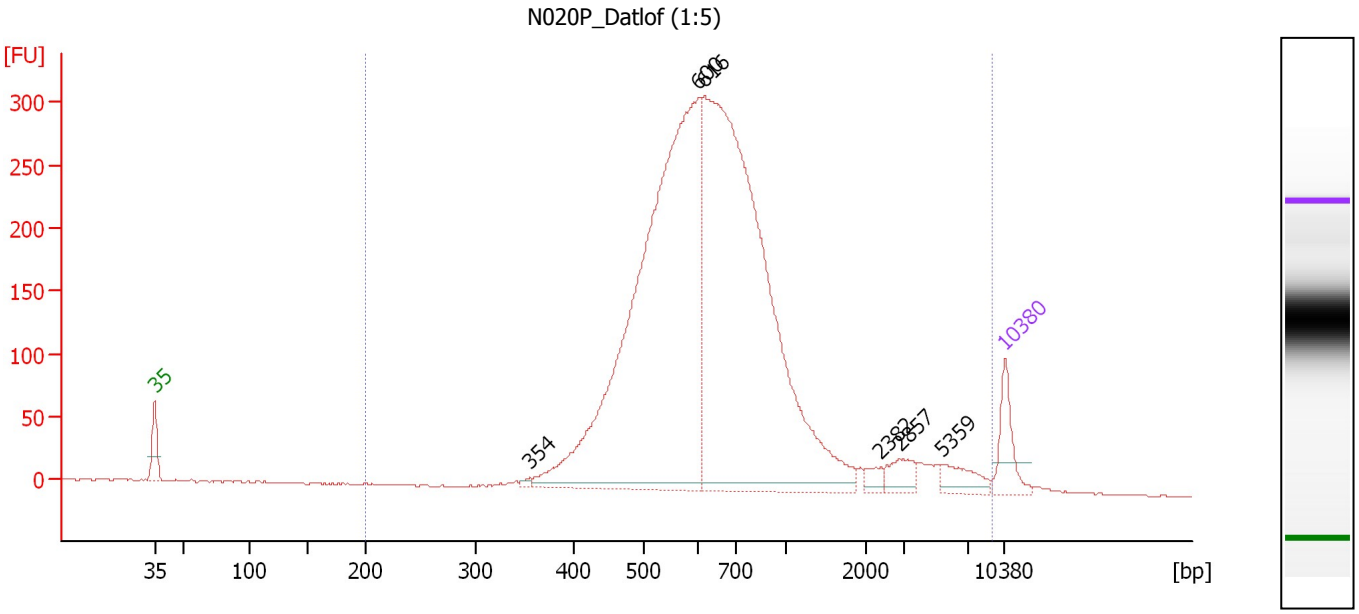
Electropherogram Summary Continued ...



Overall Results for sample 10 : N020P_Datlof (1:5)

Number of peaks found:	6	Corr. Area 1:	4,364.1
Noise:	0.5		

Peak table for sample 10 : N020P_Datlof (1:5)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	354	7.74	33.1		73.88
3	600	1,776.48	4,485.8		87.78
4	616	1,849.91	4,547.5		88.29
5	2,382	20.11	12.8		102.76
6	2,857	43.51	23.1		104.31
7	5,359	49.82	14.1		107.85
8	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 10 : N020P_Datlof (1:5)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]
200	9,149	878	3,888.40	4,364.1	9,391.4	99	100.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

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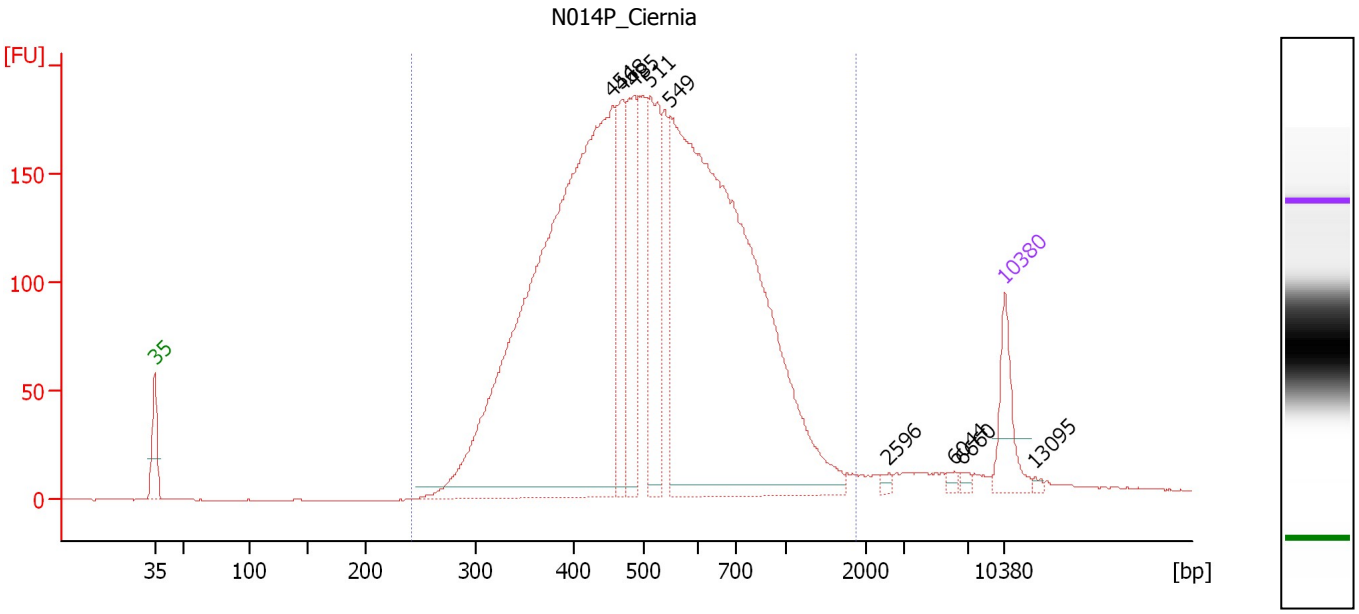
Electropherogram Summary Continued ...



Overall Results for sample 11 : N014P_Ciernia

Number of peaks found:	9	Corr. Area 1:	4,177.4
Noise:	0.3		

Peak table for sample 11 : N014P_Ciernia

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	454	1,855.15	6,196.8		80.64
3	468	183.45	594.3		81.45
4	485	252.86	790.3		82.43
5	511	283.31	839.4		83.80
6	549	1,695.20	4,682.4		85.47
7	2,596	7.32	4.3		103.46
8	6,044	7.58	1.9		108.75
9	6,660	6.98	1.6		109.55
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,095	0.00	0.0		115.41

Region table for sample 11 : N014P_Ciernia

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
241	1,871	555	4,656.56	4,177.4	14,699.5	95	39.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-02-04\2019-02-04_002.xad

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