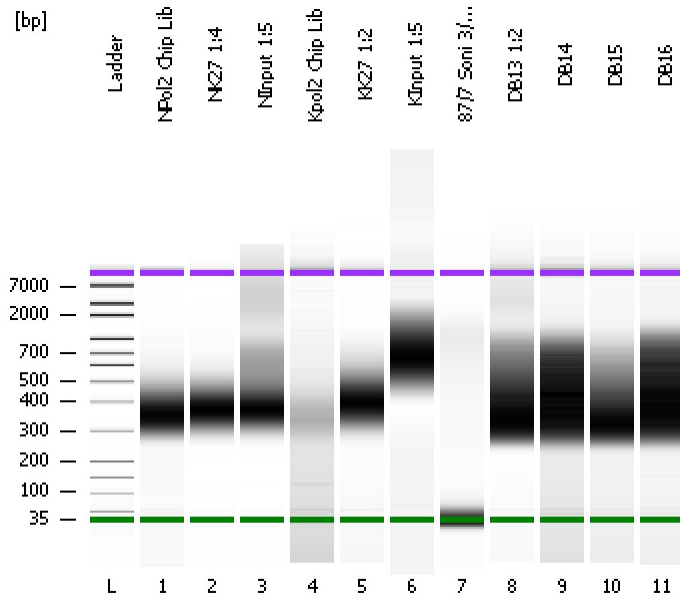


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
Modified: 3/20/2012 5:14:36 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

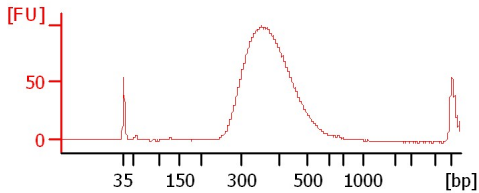
Assay Information:

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

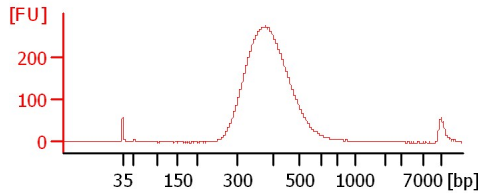
Chip Information:

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

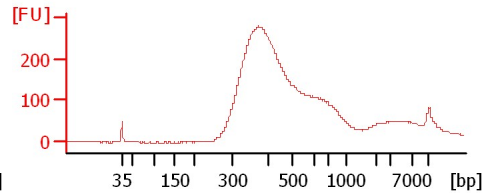
NPo12 Chip Lib



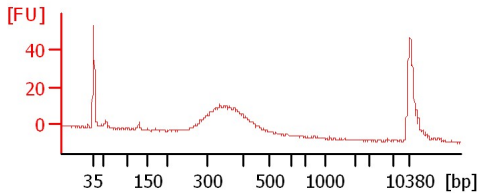
NK27 1:4



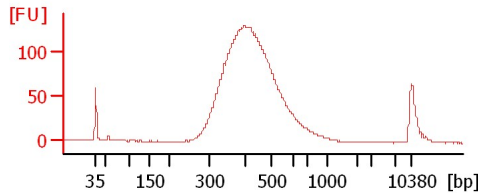
NInput 1:5



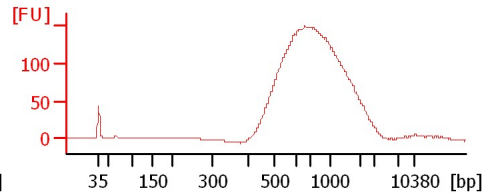
Kpo12 Chip Lib



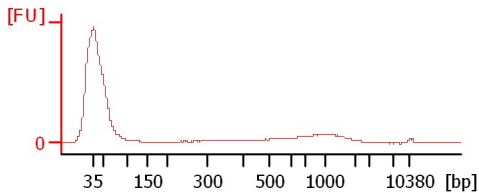
KK27 1:2



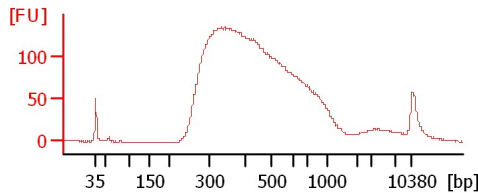
KInput 1:5



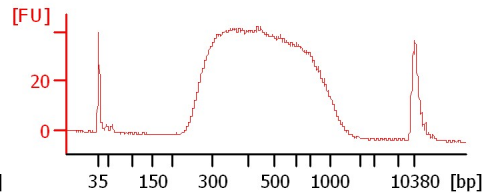
87/7 Soni 3/20/12



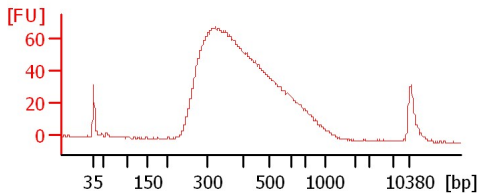
DB13 1:2



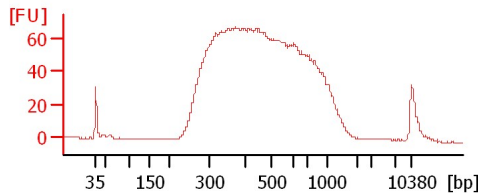
DB14



DB15



DB16



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
Modified: 3/20/2012 5:14:36 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NPol2 Chip Lib		<input type="checkbox"/>	✓			
NK27 1:4		<input type="checkbox"/>	✓			
NInput 1:5		<input type="checkbox"/>	✓			
Kpol2 Chip Lib		<input type="checkbox"/>	✓			
KK27 1:2		<input type="checkbox"/>	✓			
KInput 1:5		<input type="checkbox"/>	✓			
87/7 Soni 3/20/12		<input type="checkbox"/>	✓			
DB13 1:2		<input type="checkbox"/>	✓			
DB14		<input type="checkbox"/>	✓			
DB15		<input type="checkbox"/>	✓			
DB16		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
Modified: 3/20/2012 5:14:36 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

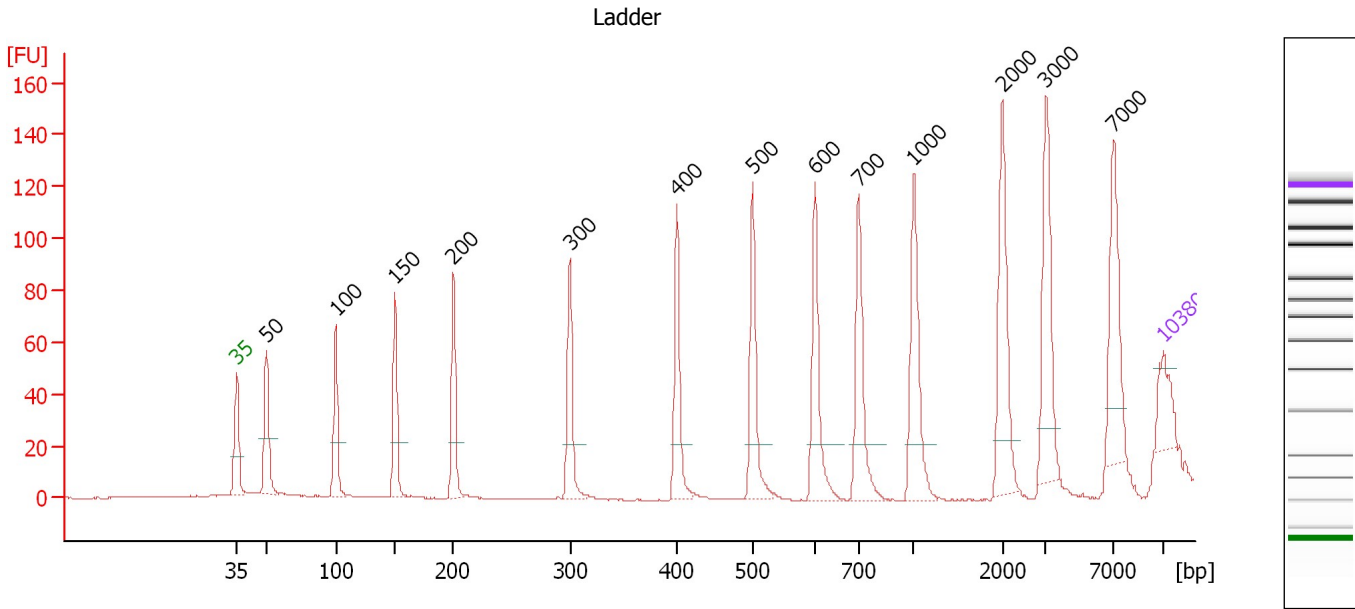
Ladder

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:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

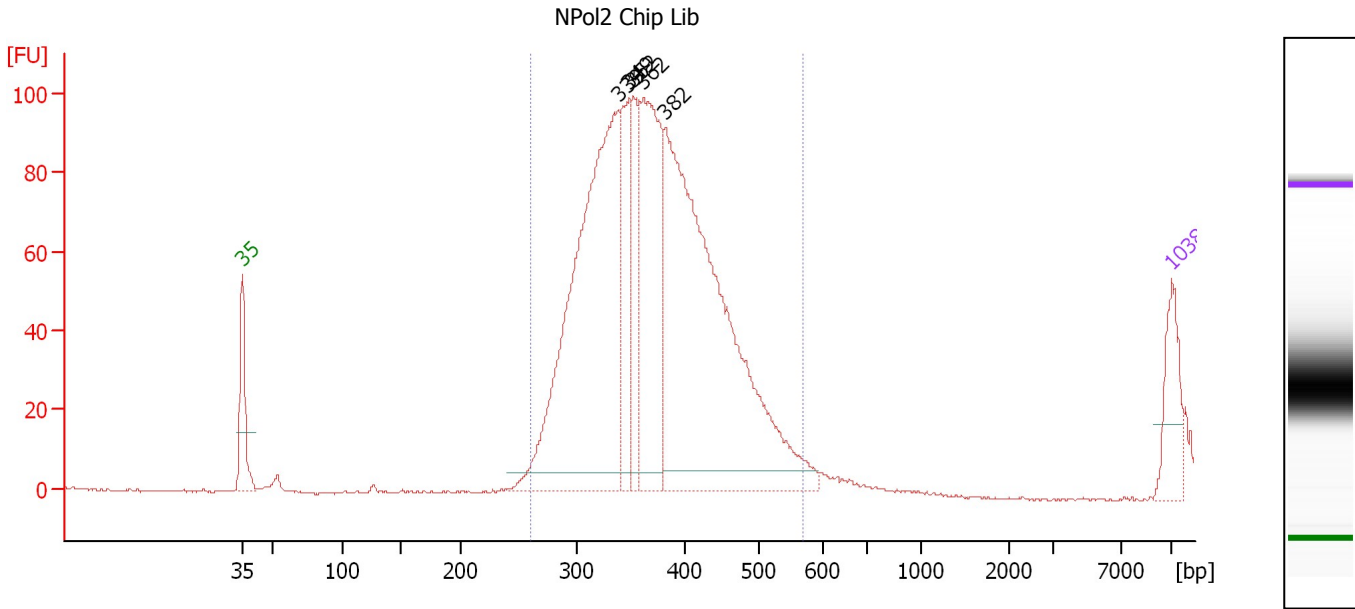
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NPo2 Chip Lib

Number of peaks found: 5 Corr. Area 1: 1,402.7
 Noise: 0.3

Peak table for sample 1 : NPo2 Chip Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	339	1,035.92	4,630.1	
3	349	218.39	947.0	
4	352	146.16	628.4	
5	362	437.75	1,830.5	
6	382	1,156.76	4,586.0	
7	10,380	75.00	10.9	Upper Marker

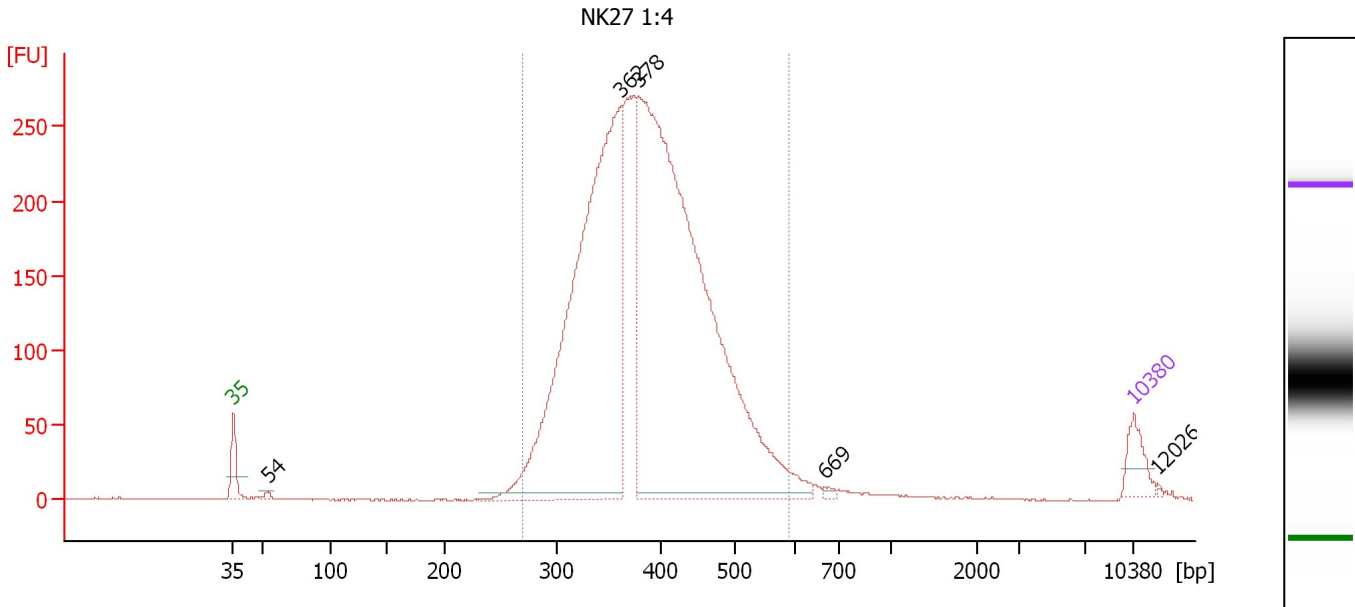
Region table for sample 1 : NPo2 Chip Lib

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
261	10,545.6	369	2,506.59	569	1,402.7	100	14.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NK27 1:4

Number of peaks found: 5 Corr. Area 1: 4,201.1
 Noise: 0.3

Peak table for sample 2 : NK27 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	15.33	431.8	
3	362	2,456.81	10,290.1	
4	378	3,404.66	13,642.2	
5	669	12.96	29.4	
6	10,380	75.00	10.9	Upper Marker
7	12,026	0.00	0.0	

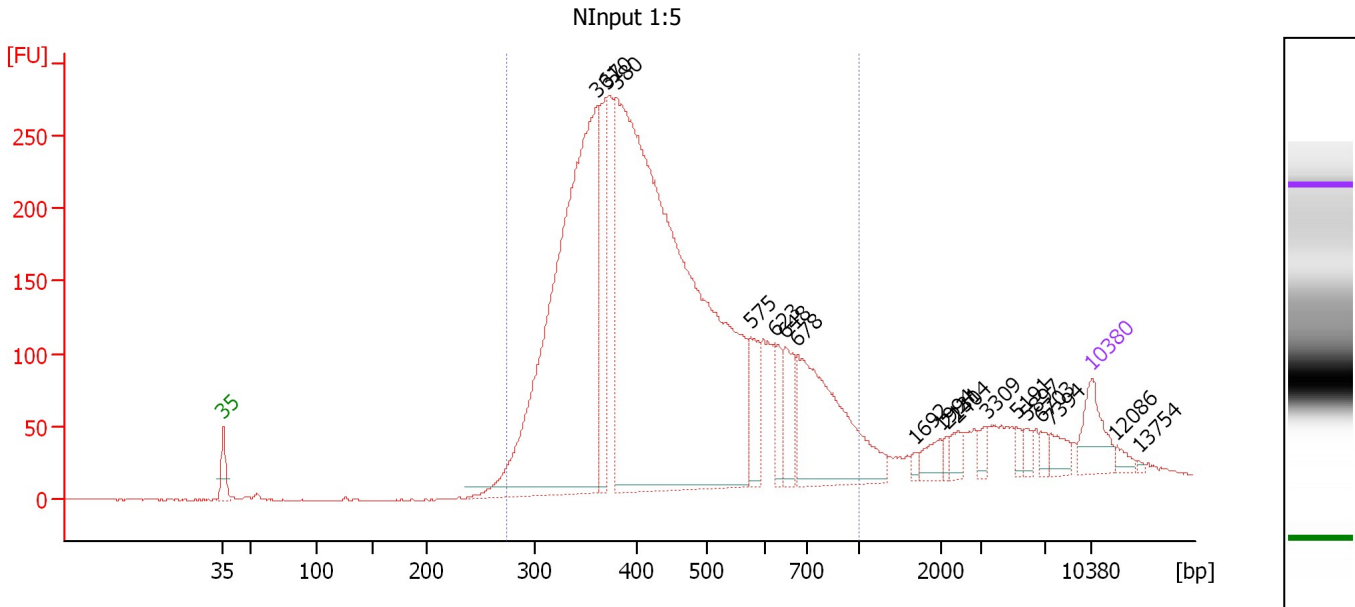
Region table for sample 2 : NK27 1:4

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
269	25,242.5	390	6,297.18	588	4,201.1	97	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NInput 1:5

Number of peaks found: 18 Corr. Area 1: 5,179.0
 Noise: 0.3

Peak table for sample 3 : NInput 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	361	1,550.57	6,505.2	
3	370	274.50	1,123.5	
4	380	2,549.85	10,160.0	
5	575	107.90	284.6	
6	623	68.55	166.6	
7	648	94.89	221.8	
8	678	405.61	906.3	
9	1,692	9.40	8.4	
10	1,994	32.71	24.9	
11	2,131	12.71	9.0	
12	2,404	25.65	16.2	
13	3,309	19.87	9.1	
14	5,191	16.11	4.7	
15	5,897	16.61	4.3	
16	6,703	16.10	3.6	
17	7,394	31.02	6.4	
18	10,380	75.00	10.9	Upper Marker
19	12,086	0.00	0.0	
20	13,754	0.00	0.0	

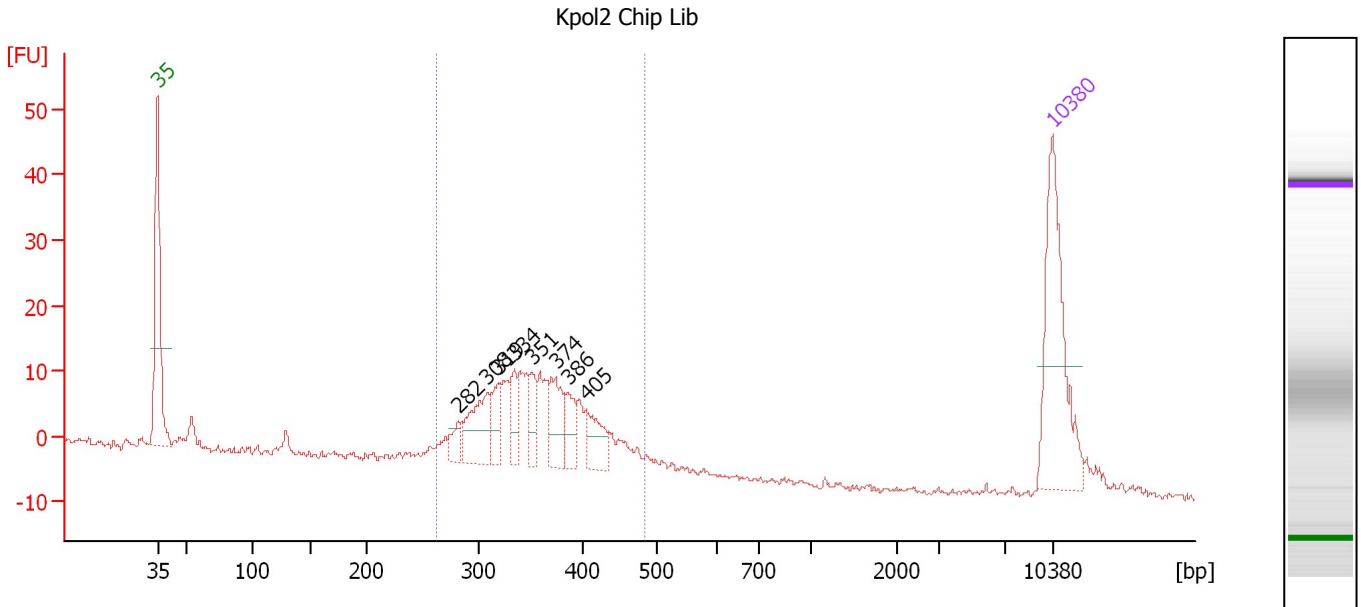
Region table for sample 3 : NInput 1:5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
274	18,450.0	455	5,031.48	1,000	5,179.0	91	30.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Kpol2 Chip Lib

Number of peaks found: 8 Corr. Area 1: 187.9
 Noise: 0.4

Peak table for sample 4 : Kpol2 Chip Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	282	12.56	67.6	
3	308	43.20	212.5	
4	319	19.36	91.9	
5	334	16.92	76.8	
6	351	16.17	69.8	
7	374	29.12	118.0	
8	386	17.98	70.6	
9	405	23.77	88.9	
10	10,380	75.00	10.9	Upper Marker

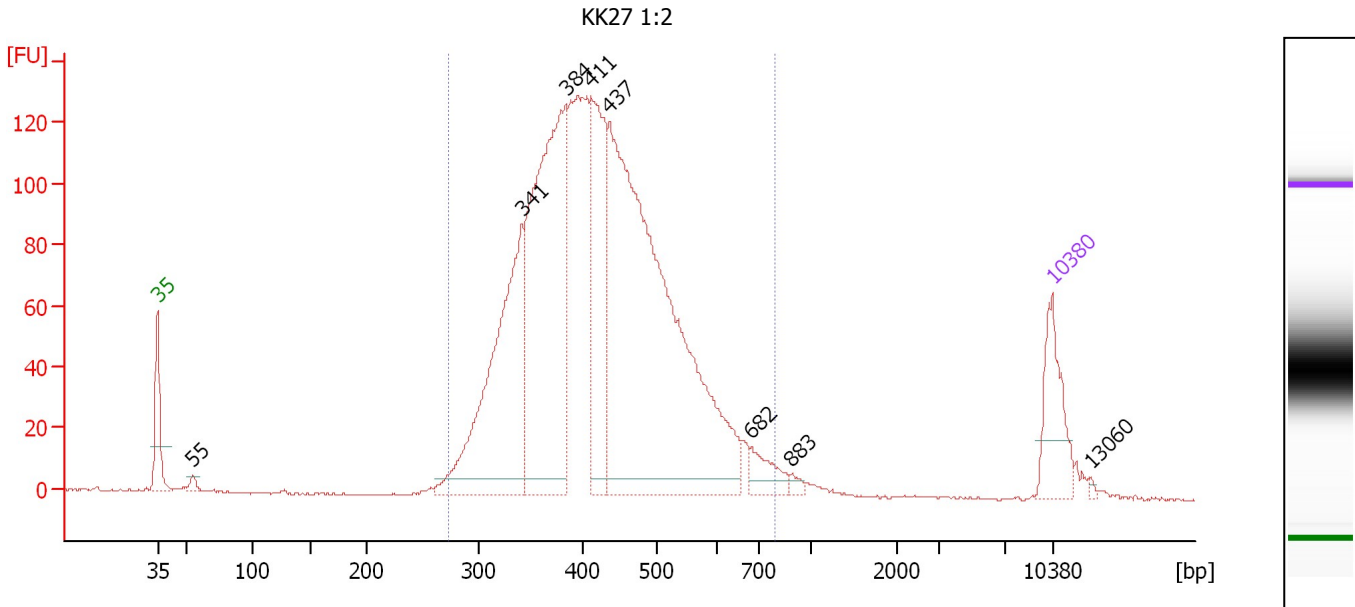
Region table for sample 4 : Kpol2 Chip Lib

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
262	1,162.3	356	267.35	485	187.9	91	13.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : KK27 1:2

Number of peaks found: 8 Corr. Area 1: 2,289.4
 Noise: 0.2

Peak table for sample 5 : KK27 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	55	11.10	305.4	
3	341	429.84	1,908.5	
4	384	582.17	2,299.6	
5	411	250.60	923.6	
6	437	987.59	3,426.7	
7	682	40.51	89.9	
8	883	7.59	13.0	
9	10,380	75.00	10.9	Upper Marker
10	13,060	0.00	0.0	

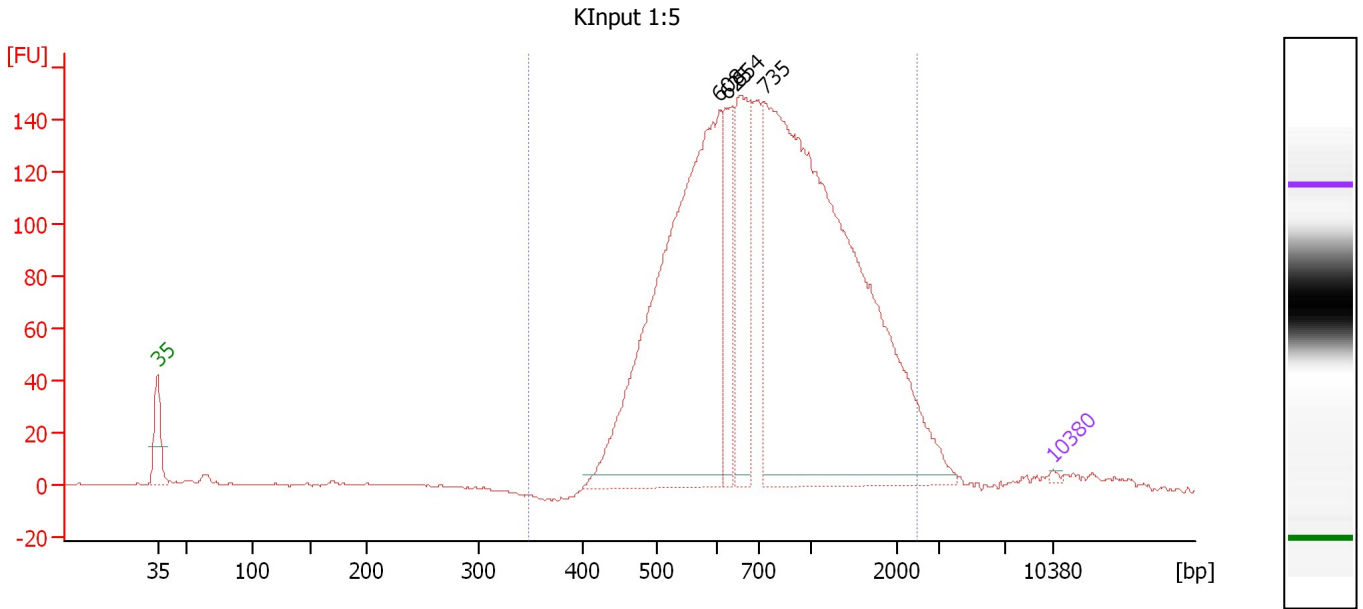
Region table for sample 5 : KK27 1:2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
273	9,758.9	430	2,629.86	791	2,289.4	97	20.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : KInput 1:5

Number of peaks found: 4 Corr. Area 1: 2,418.1
 Noise: 0.3

Peak table for sample 6 : KInput 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	608	22,698.40	56,586.7	
3	625	3,282.59	7,958.0	
4	654	5,775.71	13,375.6	
5	735	34,597.88	71,353.0	
6	10,380	75.00	10.9	Upper Marker

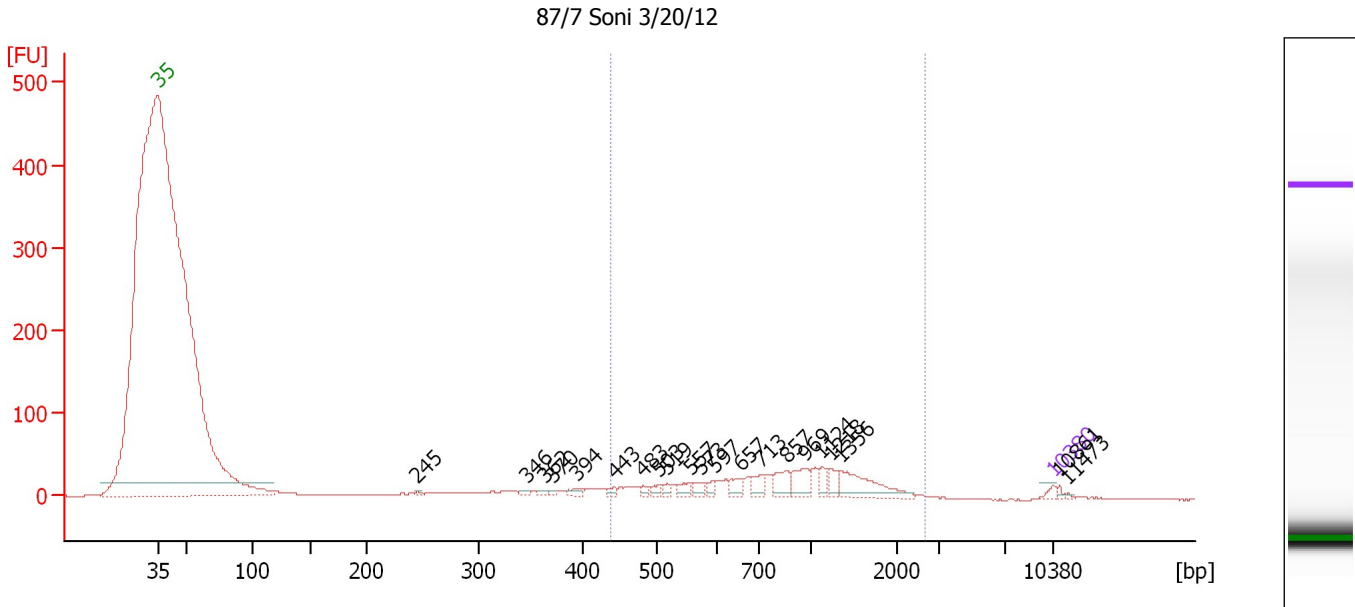
Region table for sample 6 : KInput 1:5

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
348	134,841.5	892	64,287.19	2,466	2,418.1	97	48.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 87/7 Soni 3/20/12

Number of peaks found: 21 Corr. Area 1: 576.5
 Noise: 0.7

Peak table for sample 7 : 87/7 Soni 3/20/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	245	29.22	180.7	
3	346	70.31	308.2	
4	362	70.28	293.8	
5	370	53.59	219.3	
6	394	123.21	474.3	
7	443	82.86	283.1	
8	483	85.37	267.7	
9	503	117.44	353.5	
10	519	104.82	306.2	
11	557	167.17	454.9	
12	573	155.61	411.3	
13	597	127.12	322.7	
14	657	231.49	533.8	
15	713	259.37	551.1	
16	857	349.70	618.5	
17	969	436.63	682.8	
18	1,124	205.02	276.4	
19	1,218	214.75	267.1	
20	1,356	810.54	905.8	
21	10,380	75.00	10.9	Upper Marker
22	10,861	0.00	0.0	
23	11,473	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...

... Region table for sample 7 :

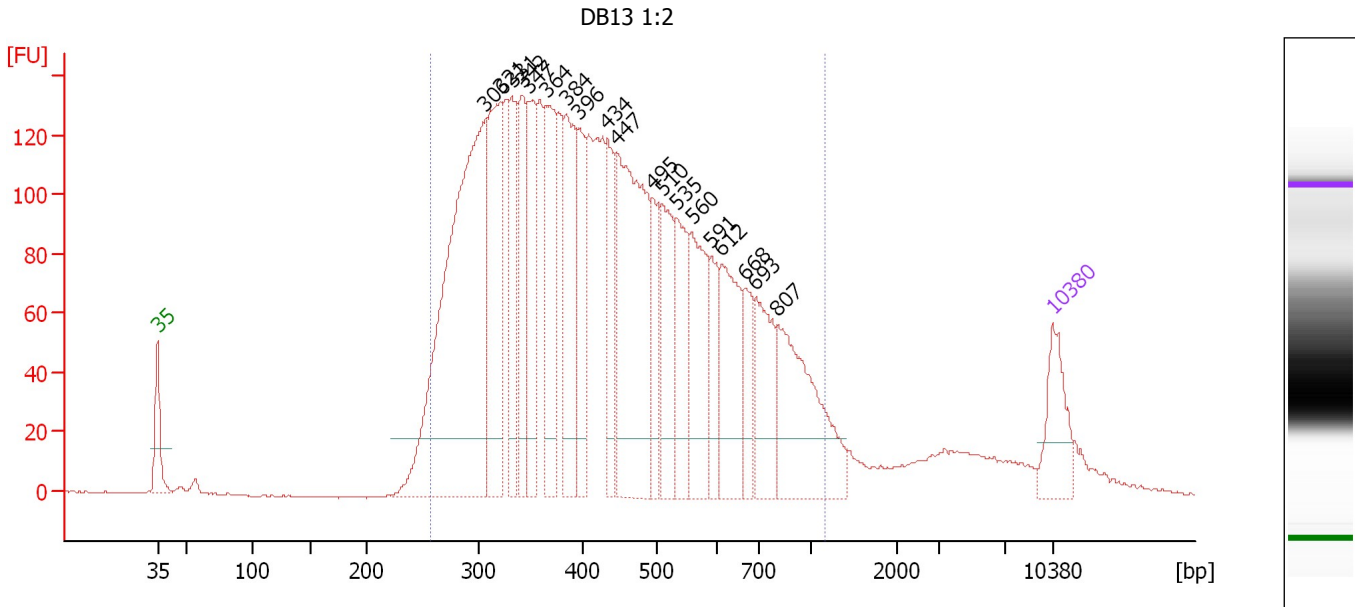
87/7 Soni 3/20/12

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
438	9,384.5	974	4,761.57	2,650	576.5	70	46.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : DB13 1:2

Height Threshold [FU] : 20

Overall Results for sample 8 : DB13 1:2

Number of peaks found: 19 Corr. Area 1: 3,857.2
 Noise: 0.3

Peak table for sample 8 : DB13 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	306	880.74	4,359.5	
3	321	326.77	1,540.5	
4	331	151.25	691.5	
5	342	159.05	704.7	
6	347	178.78	780.0	
7	364	232.25	965.8	
8	384	204.77	808.5	
9	396	129.12	493.9	
10	434	119.52	417.6	
11	447	441.09	1,495.3	
12	495	89.58	274.1	
13	510	156.62	465.0	
14	535	125.51	355.7	
15	560	171.06	462.9	
16	591	67.06	171.9	
17	612	168.33	416.8	
18	668	74.53	169.0	
19	693	134.79	294.8	
20	807	251.96	473.3	
21	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...

... Region table for sample 8 :

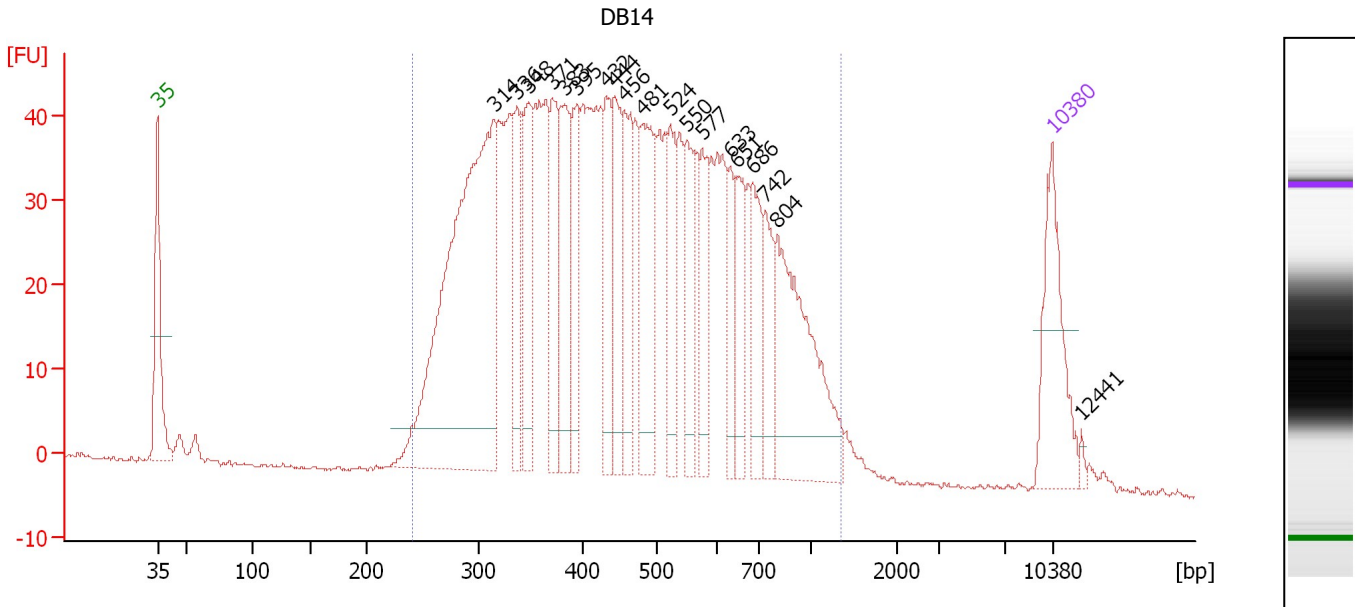
DB13 1:2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
256	17,794.3	461	4,662.36	1,166	3,857.2	92	36.7	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : DB14

Number of peaks found: 19 Corr. Area 1: 1,478.8
 Noise: 0.3

Peak table for sample 9 : DB14

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	314	491.33	2,370.0	
3	336	76.59	345.5	
4	348	80.84	352.3	
5	371	82.56	337.6	
6	383	94.40	373.5	
7	395	67.64	259.7	
8	432	76.21	267.6	
9	444	84.43	288.1	
10	456	71.95	238.8	
11	481	111.14	349.8	
12	524	60.20	174.1	
13	550	59.44	163.7	
14	577	48.77	128.0	
15	633	41.75	100.0	
16	651	53.26	123.9	
17	686	59.49	131.4	
18	742	47.04	96.0	
19	804	168.50	317.5	
20	10,380	75.00	10.9	Upper Marker
21	12,441	0.00	0.0	

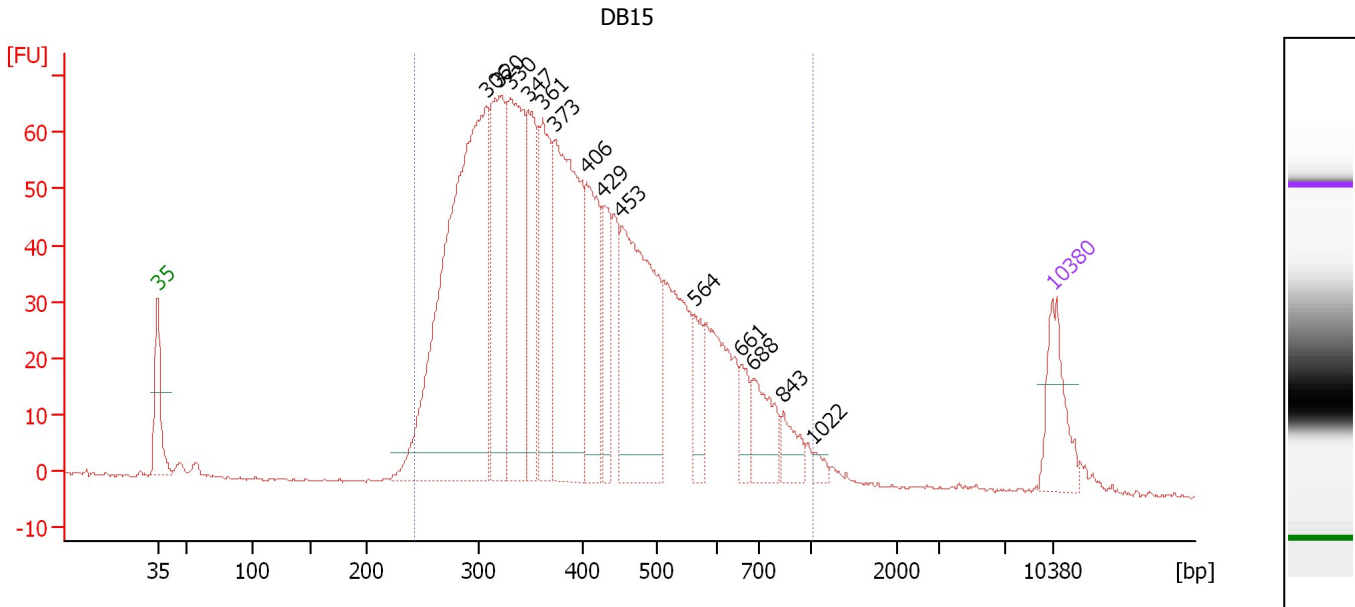
Region table for sample 9 : DB14

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
241	9,664.1	492	2,636.63	1,358	1,478.8	97	39.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : DB15

Number of peaks found: 14 Corr. Area 1: 1,661.6
 Noise: 0.2

Peak table for sample 10 : DB15

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	306	913.85	4,518.1	
3	320	310.82	1,473.7	
4	330	351.68	1,613.3	
5	347	159.36	695.9	
6	361	194.14	814.3	
7	373	426.42	1,734.2	
8	406	180.40	673.5	
9	429	103.30	365.2	
10	453	370.96	1,240.6	
11	564	56.06	150.7	
12	661	39.36	90.3	
13	688	78.30	172.3	
14	843	38.75	69.6	
15	1,022	11.40	16.9	
16	10,380	75.00	10.9	Upper Marker

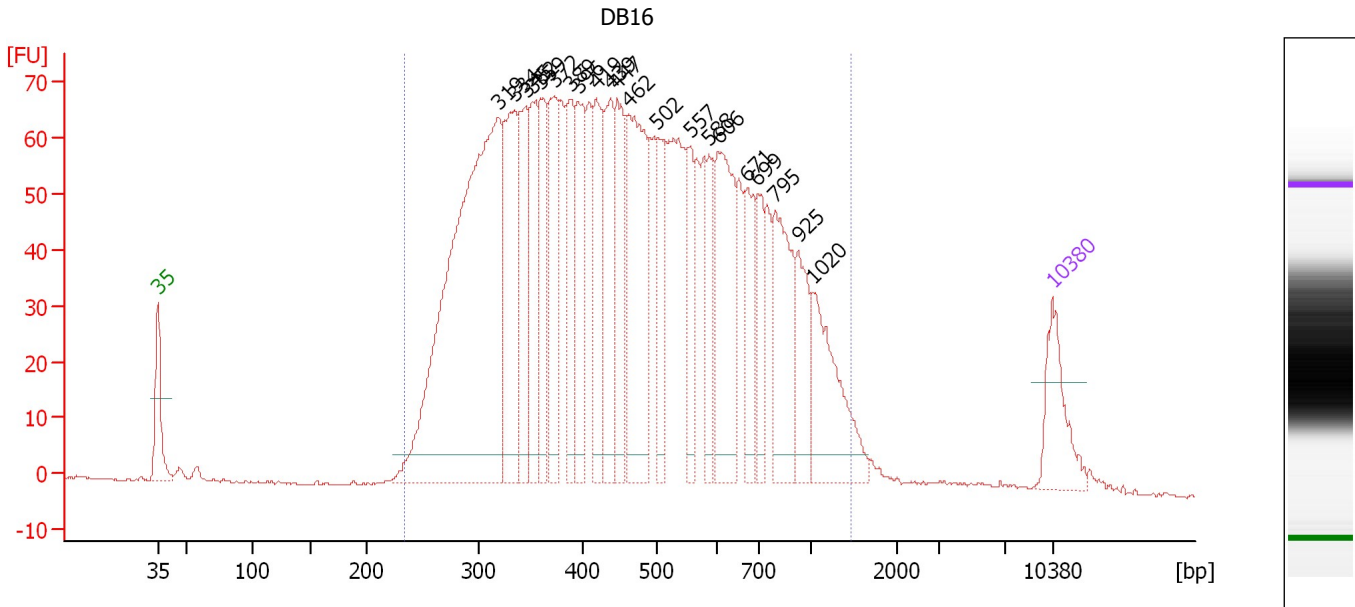
Region table for sample 10 : DB15

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
243	15,267.7	419	3,748.18	1,015	1,661.6	97	32.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : DB16

Number of peaks found: 21 Corr. Area 1: 2,307.8
 Noise: 0.3


Peak table for sample 11 : DB16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	319	988.19	4,697.8	
3	334	244.08	1,108.2	
4	345	150.82	662.1	
5	352	150.79	648.4	
6	359	139.59	589.2	
7	372	165.38	673.3	
8	389	139.13	542.0	
9	396	154.25	589.9	
10	419	141.76	512.3	
11	439	148.65	513.3	
12	447	154.98	525.0	
13	462	293.15	961.9	
14	502	113.21	341.7	
15	557	87.20	237.3	
16	588	87.93	226.7	
17	606	206.51	516.4	
18	671	83.30	188.2	
19	699	76.03	164.9	
20	795	167.76	319.6	
21	925	85.96	140.8	
22	1,020	154.95	230.2	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
Modified: 3/20/2012 5:14:36 PM

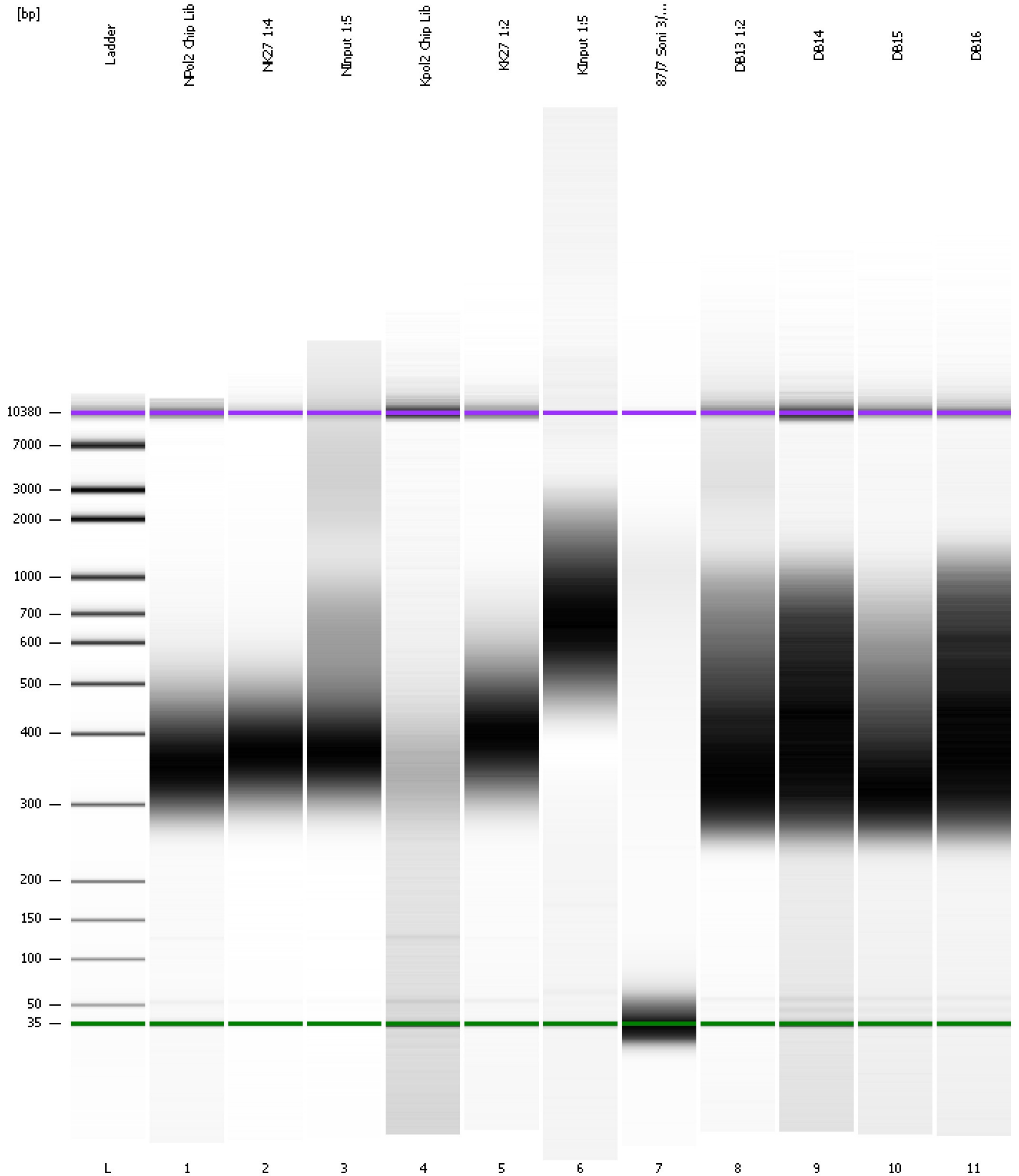
Electropherogram Summary Continued ...**... Region table for sample 11 : DB16**

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
233	17,892.0	509	4,931.37	1,461	2,307.8	98	43.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
Modified: 3/20/2012 5:14:36 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad

Created: 3/20/2012 4:30:04 PM
 Modified: 3/20/2012 5:14:36 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		3/20/2012 5:11:23 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-20\2012-03-20_003.xad)		Instrument	Run		3/20/2012 4:30:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/20/2012 4:30:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/20/2012 4:30:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/20/2012 4:30:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/20/2012 4:30:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/20/2012 4:30:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/20/2012 4:30:09 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1