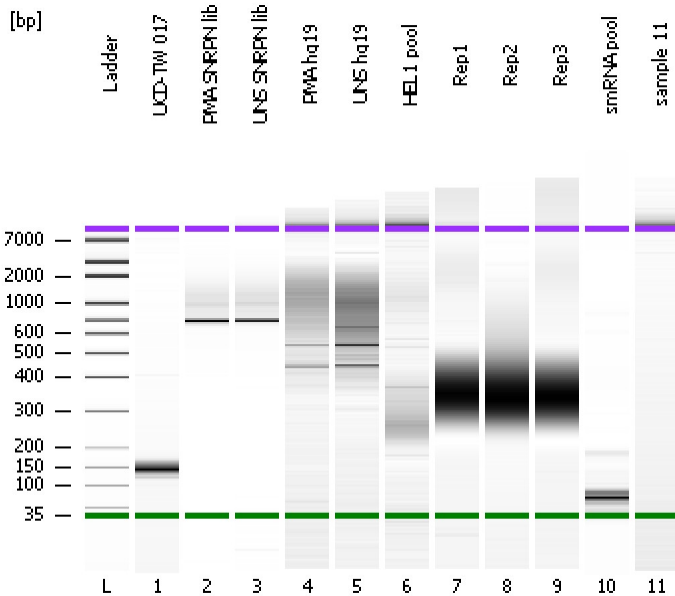


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
Modified: 6/22/2012 2:25:04 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

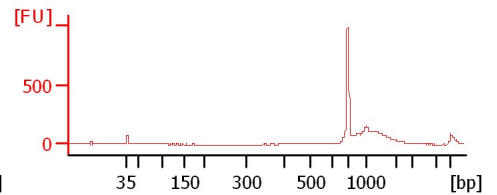
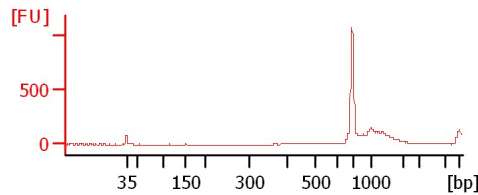
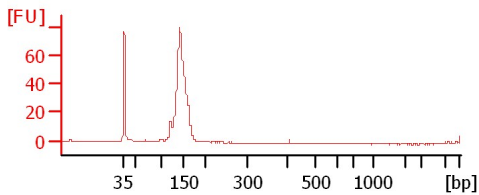
Chip Information:

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

UCD-TW 017

PMA SNRPN lib

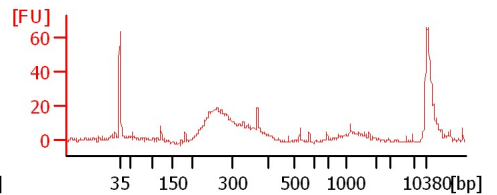
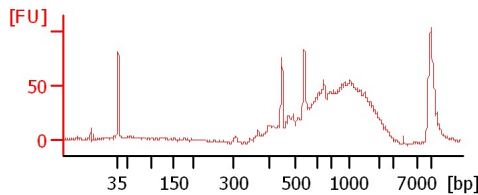
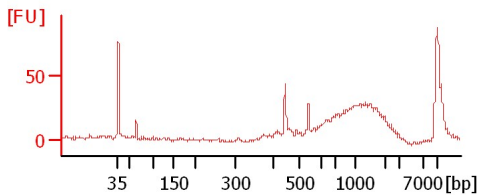
UNS SNRPN lib



PMA hg19

UNS hg19

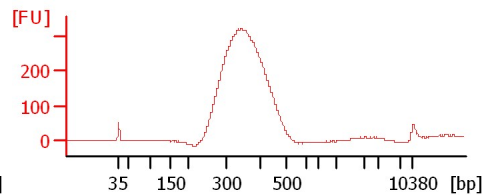
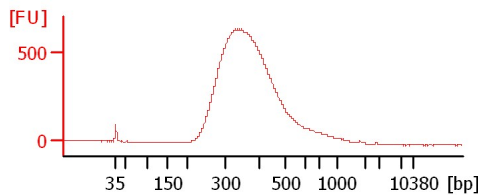
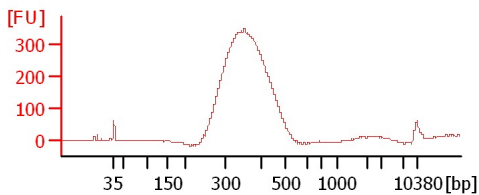
HEL1 pool



Rep1

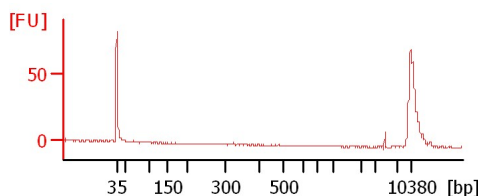
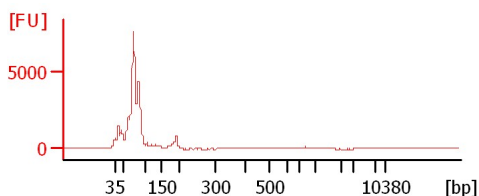
Rep2

Rep3



smRNA pool

sample 11



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
Modified: 6/22/2012 2:25:04 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
UCD-TW 017		<input type="checkbox"/>	✓			
PMA SNRPN lib		<input type="checkbox"/>	✓			
UNS SNRPN lib		<input type="checkbox"/>	✓			
PMA hg19		<input type="checkbox"/>	✓			
UNS hg19		<input type="checkbox"/>	✓			
HEL1 pool		<input type="checkbox"/>	✓			
Rep1		<input type="checkbox"/>	✓			
Rep2		<input type="checkbox"/>	✓			
Rep3		<input type="checkbox"/>	✓			
smRNA pool		<input type="checkbox"/>	✓			
sample 11		<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\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
Modified: 6/22/2012 2:25:04 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

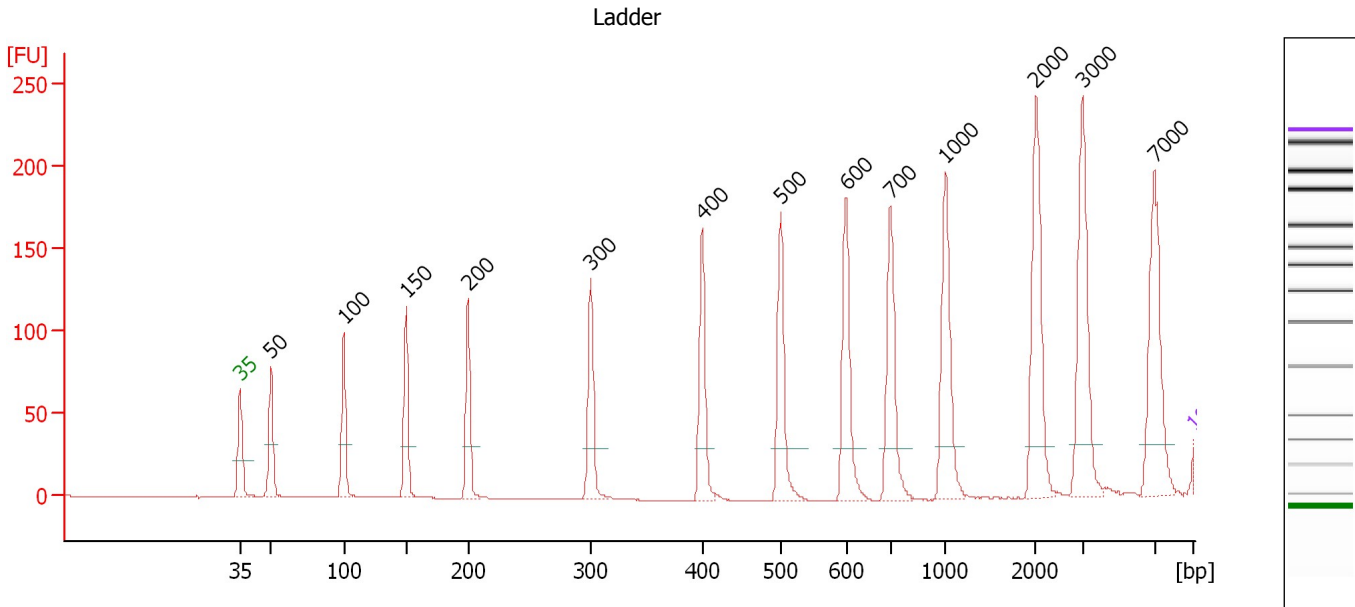
Ladder

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\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

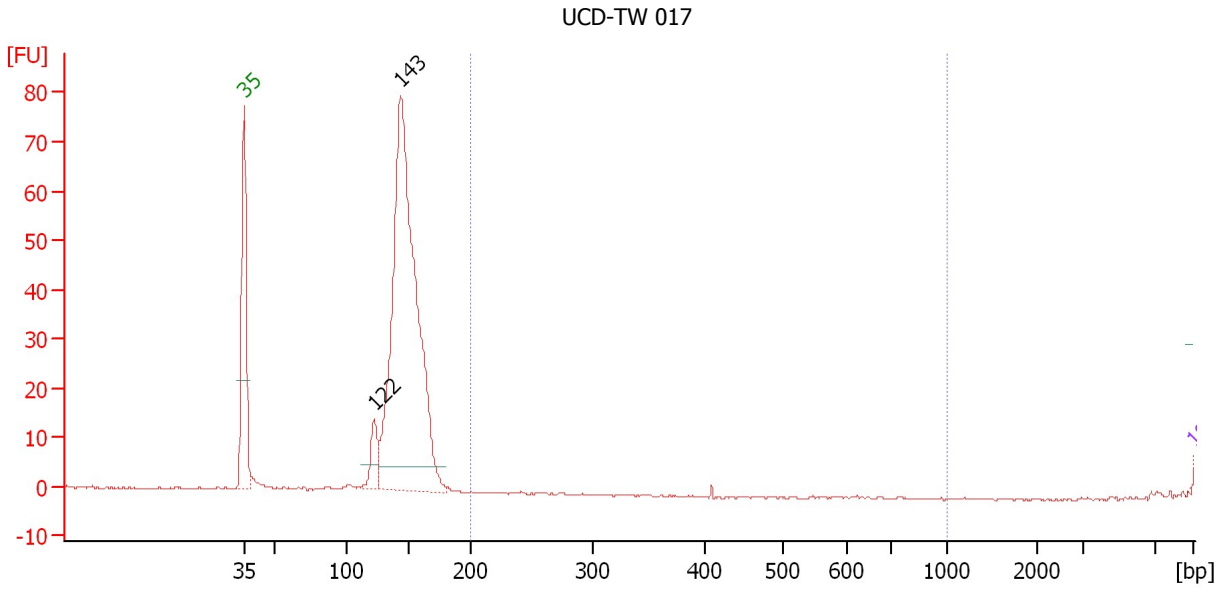
Peak table for Ladder

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\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : UCD-TW 017

Number of peaks found: 2 Corr. Area 1: 0.1
 Noise: 0.2

Peak table for sample 1 : UCD-TW 017

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	122	7,737.70	96,272.4	
3	143	130,818.08	1,383,864.9	
4	10,380	75.00	10.9	Upper Marker

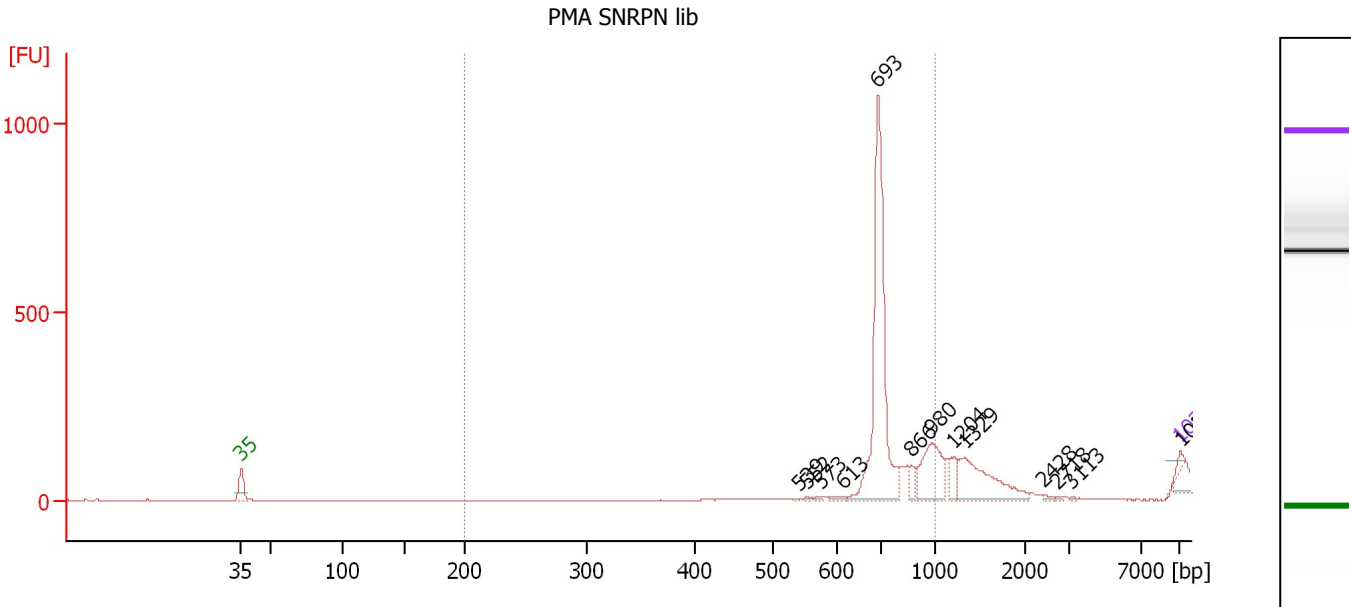
Region table for sample 1 : UCD-TW 017

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	410	149.0	40.28	0.1	0	0.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : PMA SNRPN lib

Number of peaks found: 13 Corr. Area 1: 886.0
 Noise: 0.2

Peak table for sample 2 : PMA SNRPN lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	539	11.79	33.1	
3	552	13.85	38.0	
4	573	16.04	42.4	
5	613	40.14	99.1	
6	693	3,528.74	7,719.3	
7	866	150.96	264.1	
8	802	802.03	1,240.3	
9	1,204	219.04	275.7	
10	1,329	944.01	1,076.0	
11	2,428	26.21	16.4	
12	2,718	10.99	6.1	
13	3,113	8.31	4.0	
14	10,380	75.00	10.9	Upper Marker
15	10,517	0.00	0.0	

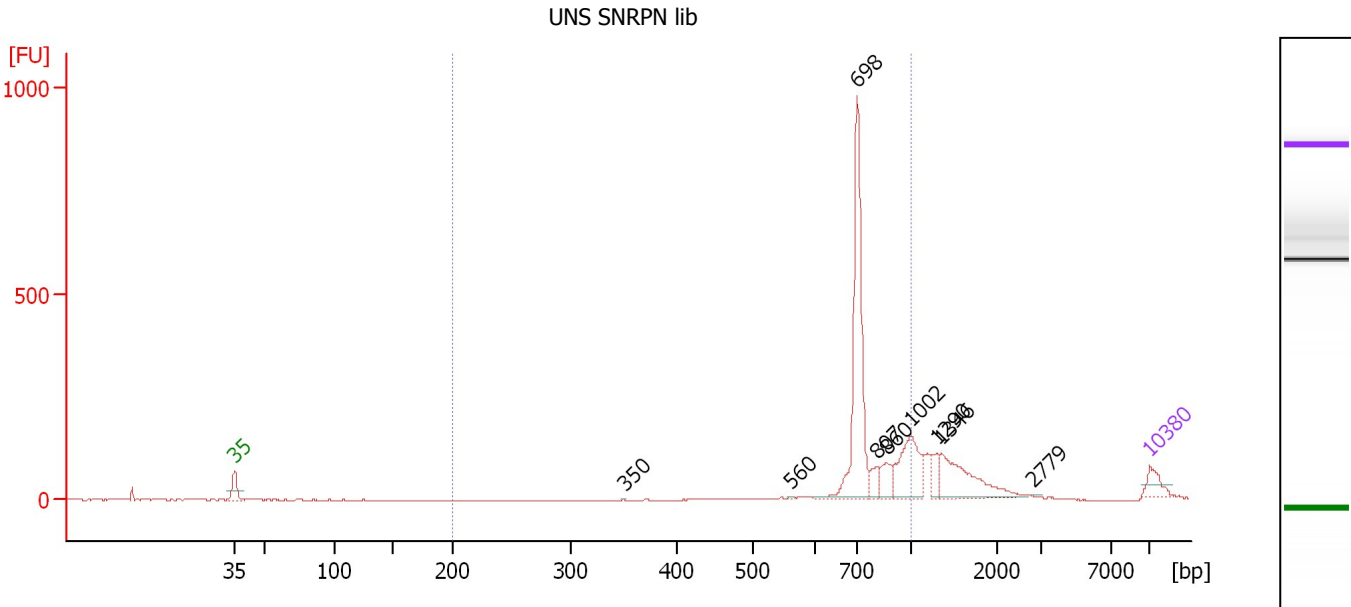
Region table for sample 2 : PMA SNRPN lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	715	5,862.0	2,756.73	886.0	93	9.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : UNS SNRPN lib

Number of peaks found: 9 Corr. Area 1: 1,140.6
 Noise: 0.5

Peak table for sample 3 : UNS SNRPN lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	350	3.17	13.7	
3	560	4.57	12.4	
4	698	1,034.59	2,244.9	
5	807	74.07	139.1	
6	860	106.26	187.1	
7	1,002	342.42	517.8	
8	1,290	80.31	94.3	
9	1,346	357.28	402.3	
10	2,779	2.76	1.5	
11	10,380	75.00	10.9	Upper Marker

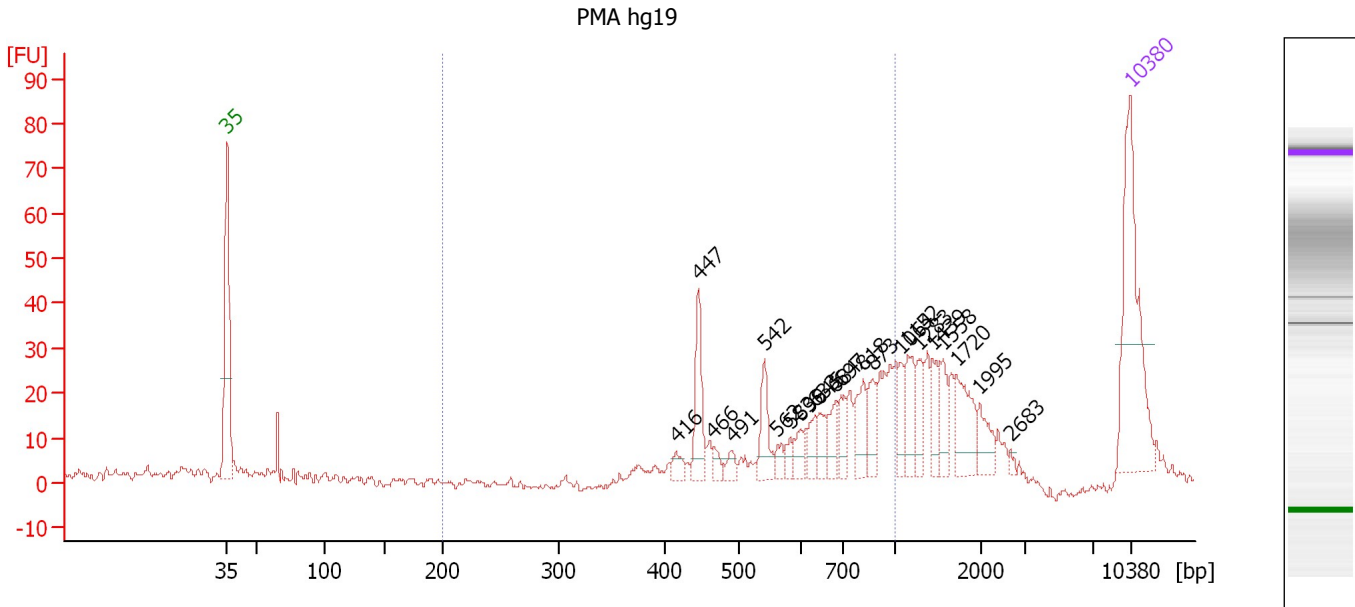
Region table for sample 3 : UNS SNRPN lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	759	2,790.1	1,385.26	1,140.6	65	12.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : PMA hg19

Number of peaks found: 22 Corr. Area 1: 264.7
 Noise: 0.8

Peak table for sample 4 : PMA hg19

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	416	8.37	30.5	
3	447	33.88	114.9	
4	466	5.97	19.4	
5	491	6.93	21.4	
6	542	22.75	63.6	
7	562	6.26	16.9	
8	583	6.14	16.0	
9	599	9.01	22.8	
10	633	10.81	25.9	
11	645	10.53	24.7	
12	684	13.87	30.7	
13	697	12.48	27.1	
14	818	19.22	35.6	
15	873	16.80	29.2	
16	1,064	12.62	18.0	
17	1,152	20.65	27.2	
18	1,283	14.24	16.8	
19	1,439	14.49	15.3	
20	1,558	14.39	14.0	
21	1,720	27.13	23.9	
22	1,995	13.12	10.0	
23	2,683	1.84	1.0	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...

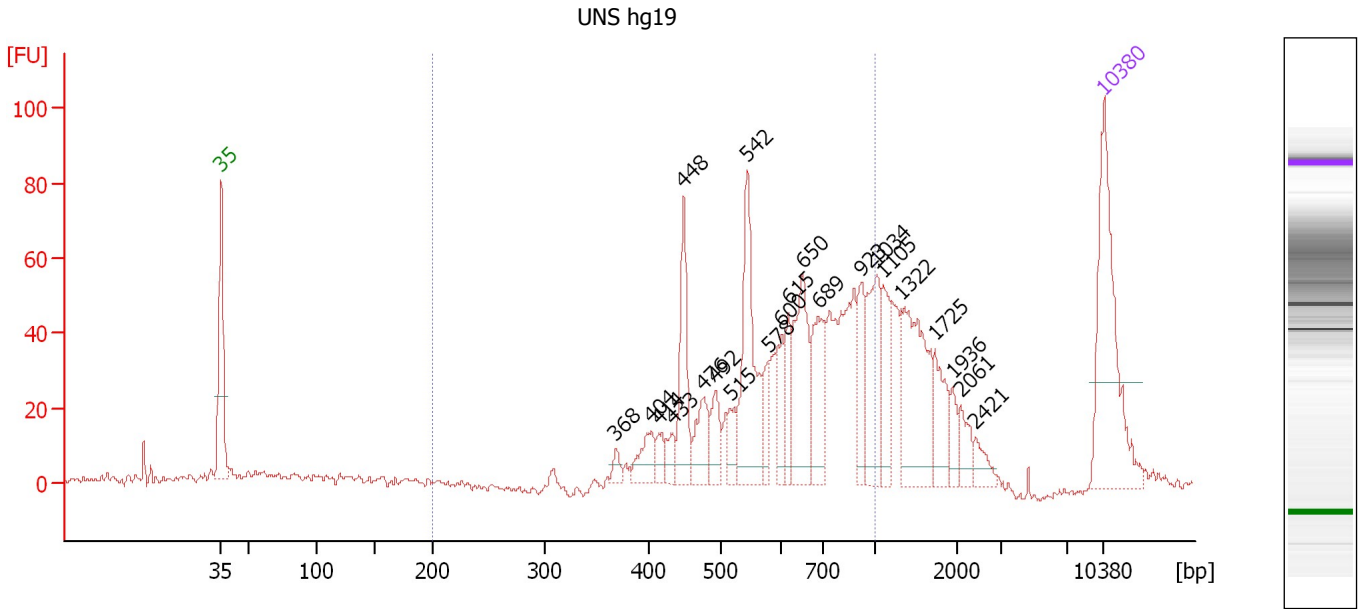
... Region table for sample 4 : PMA hg19

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	668	639.2	255.20	264.7	53	26.5	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : UNS hg19

Number of peaks found: 22 Corr. Area 1: 759.8
 Noise: 1.0

Peak table for sample 5 : UNS hg19

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	368	6.35	26.1	
3	404	18.91	70.9	
4	414	9.03	33.0	
5	433	9.81	34.3	
6	448	47.45	160.5	
7	476	24.47	77.9	
8	492	18.81	57.9	
9	515	12.87	37.8	
10	542	75.64	211.3	
11	578	14.34	37.6	
12	600	16.73	42.3	
13	615	18.73	46.2	
14	650	55.40	129.1	
15	689	41.06	90.3	
16	923	24.86	40.8	
17	1,034	43.55	63.8	
18	1,105	25.92	35.6	
19	1,322	67.57	77.4	
20	1,725	22.35	19.6	
21	1,936	9.46	7.4	
22	2,061	10.89	8.0	
23	2,421	8.35	5.2	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...

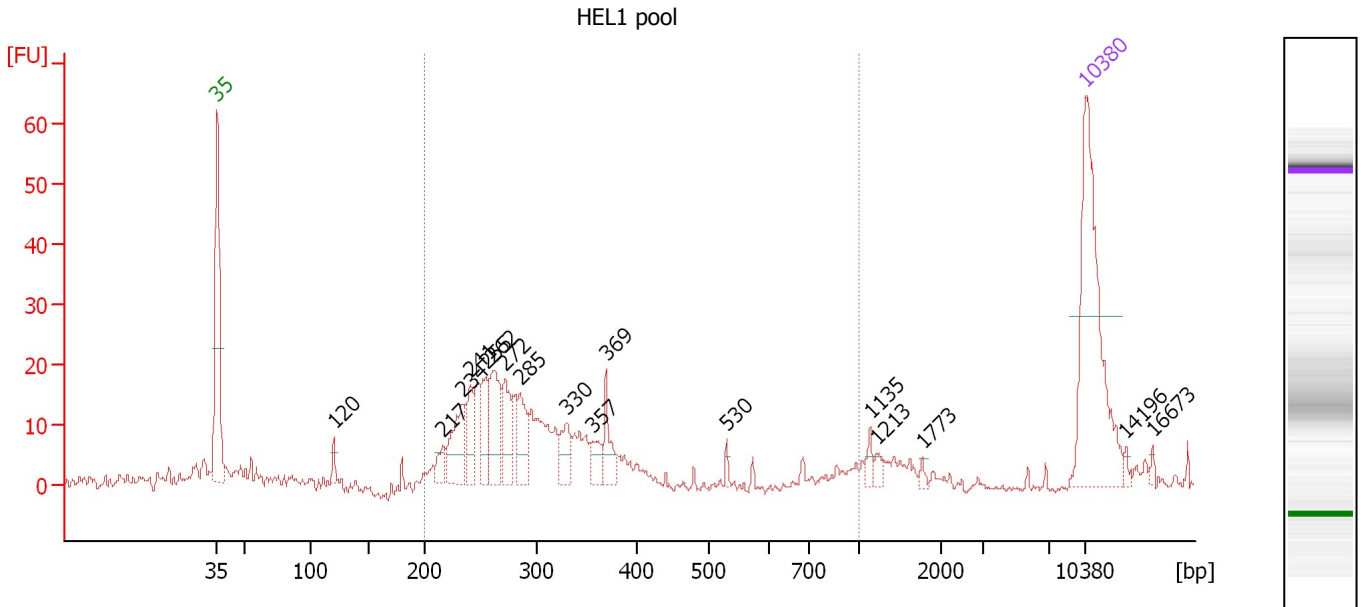
... Region table for sample 5 : UNS hg19

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	642	1,360.3	527.97	759.8	67	25.8	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HEL1 pool

Number of peaks found: 17 Corr. Area 1: 188.7
 Noise: 0.7

Peak table for sample 6 : HEL1 pool

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	120	5.38	68.2	
3	217	9.90	69.3	
4	234	32.22	208.8	
5	241	17.70	111.1	
6	255	25.37	150.6	
7	262	34.82	201.4	
8	272	25.04	139.5	
9	285	21.93	116.4	
10	330	15.10	69.3	
11	357	11.02	46.8	
12	369	15.25	62.6	
13	530	2.50	7.1	
14	1,135	3.94	5.3	
15	1,213	3.61	4.5	
16	1,773	1.91	1.6	
17	10,380	75.00	10.9	Upper Marker
18	14,196	0.00	0.0	
19	16,673	0.00	0.0	

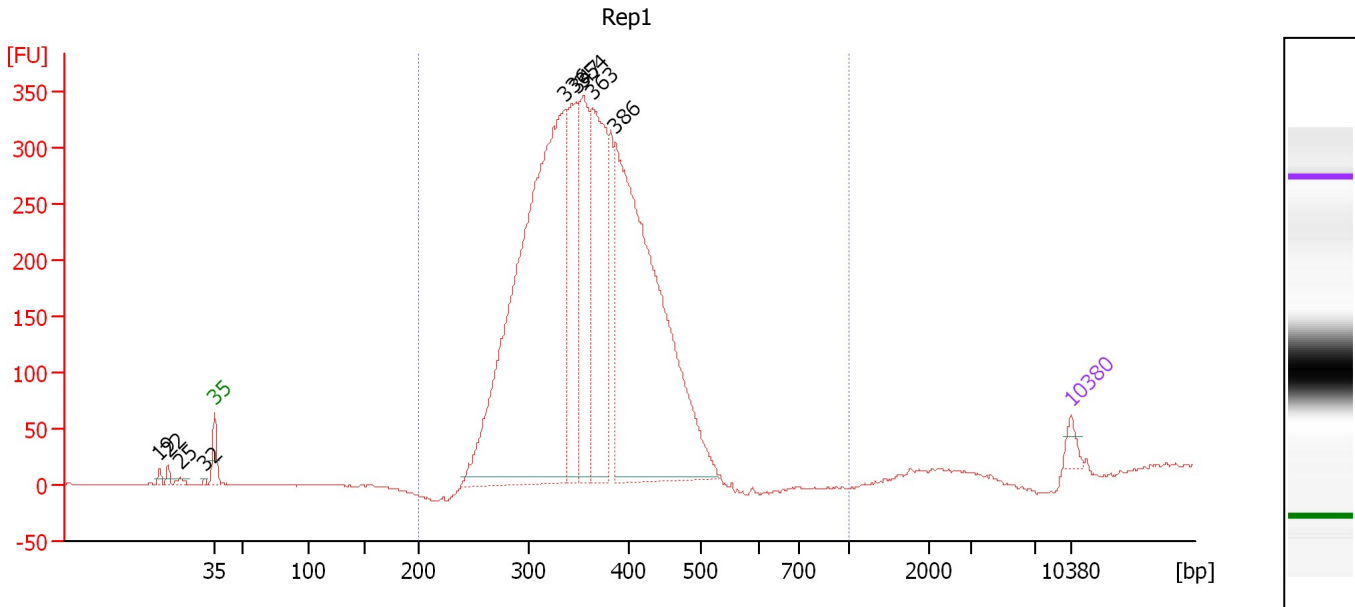
Region table for sample 6 : HEL1 pool

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	282	1,257.7	228.69	188.7	87	15.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Rep1

Number of peaks found: 9 Corr. Area 1: 5,562.9
 Noise: 0.5

Peak table for sample 7 : Rep1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	19	0.00	0.0	
2	22	0.00	0.0	
3	25	0.00	0.0	
4	32	0.00	0.0	
5	35	125.00	5,411.3	Lower Marker
6	336	6,113.12	27,599.0	
7	347	1,079.15	4,714.9	
8	354	1,345.82	5,756.2	
9	363	1,733.66	7,240.9	
10	386	4,458.90	17,493.0	
11	10,380	75.00	10.9	Upper Marker

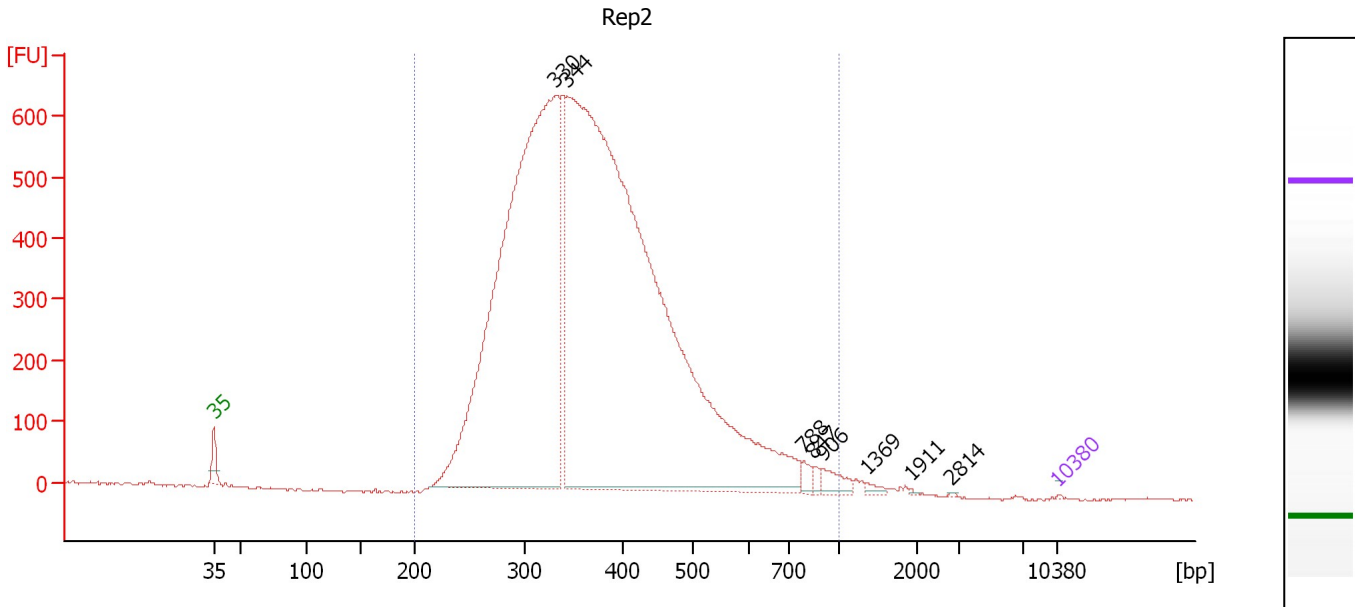
Region table for sample 7 : Rep1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	360	65,088.9	15,010.29	5,562.9	99	15.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Rep2

Number of peaks found: 8 Corr. Area 1: 13,464.4
 Noise: 2.1

Peak table for sample 8 : Rep2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	330	231,789.72	1,063,229.6	
3	344	355,775.22	1,567,753.6	
4	788	1,909.00	3,669.5	
5	847	1,182.31	2,115.1	
6	906	3,442.64	5,759.4	
7	1,369	928.40	1,027.8	
8	1,911	194.69	154.4	
9	2,814	99.07	53.3	
10	10,380	75.00	10.9	Upper Marker

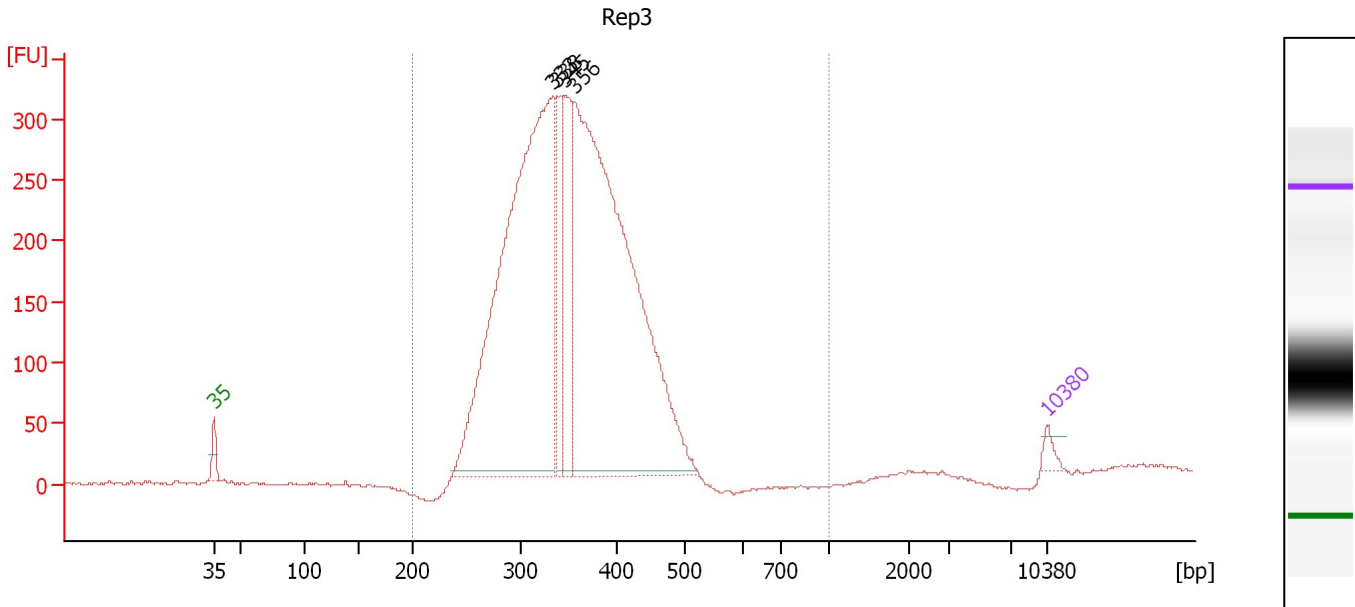
Region table for sample 8 : Rep2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	384	2,508,053.3	585,522.81	13,464.4	99	27.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : Rep3

Width Threshold [s] : 0.2

Overall Results for sample 9 : Rep3

Number of peaks found: 4 Corr. Area 1: 5,204.5
 Noise: 0.9

Peak table for sample 9 : Rep3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	333	7,645.43	34,755.1	
3	338	833.23	3,732.5	
4	345	1,154.63	5,065.5	
5	356	8,038.92	34,182.0	
6	10,380	75.00	10.9	Upper Marker

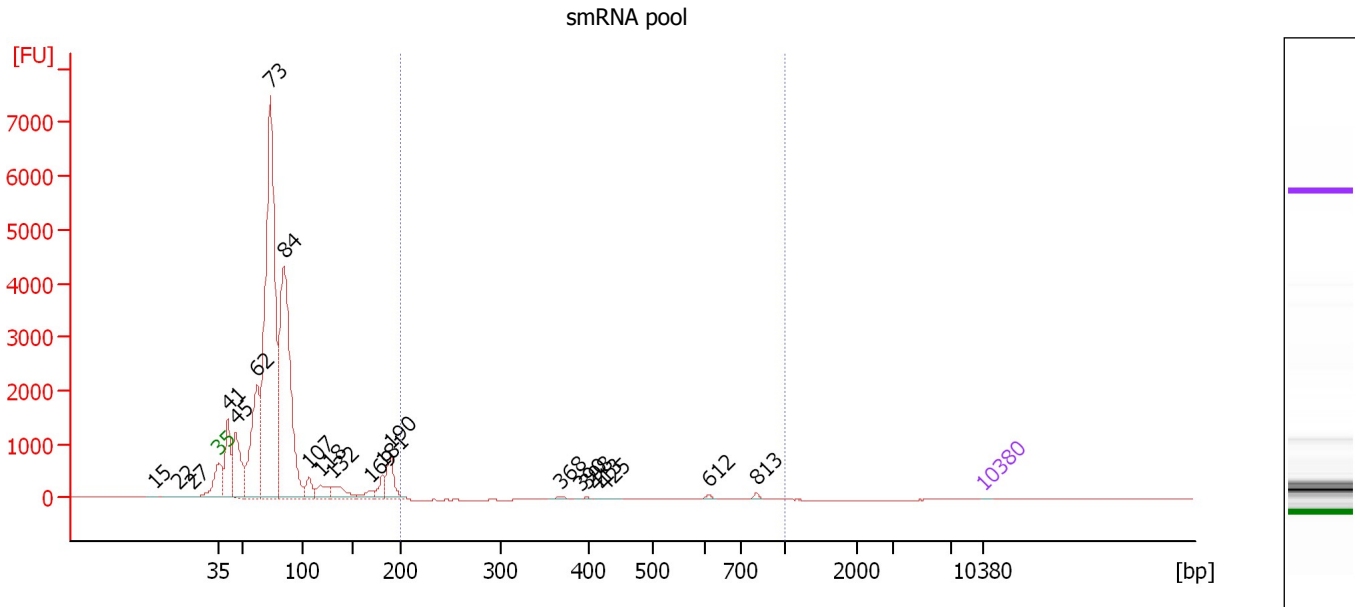
Region table for sample 9 : Rep3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	353	79,822.3	17,999.35	5,204.5	100	15.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : smRNA pool

Number of peaks found: 21 Corr. Area 1: 230.3
 Noise: 1.0

Peak table for sample 10 : smRNA pool

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	15	0.00	0.0	
2	22	0.00	0.0	
3	27	0.00	0.0	
4	35	125.00	5,411.3	Lower Marker
5	41	38,060.55	1,422,124.5	
6	45	50,247.00	1,675,158.8	
7	62	85,946.41	2,107,223.3	
8	73	318,413.13	6,598,200.0	
9	84	205,845.45	3,693,714.0	
10	107	10,521.65	149,414.5	
11	118	10,690.67	136,853.7	
12	132	13,245.76	152,485.6	
13	169	4,425.03	39,698.2	
14	181	8,499.99	71,289.8	
15	190	18,302.19	146,146.8	
16	368	579.25	2,385.4	
17	390	125.30	486.9	
18	398	157.54	600.3	
19	413	108.83	398.8	
20	425	235.36	838.5	
21	612	642.17	1,588.6	
22	813	836.13	1,559.2	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...

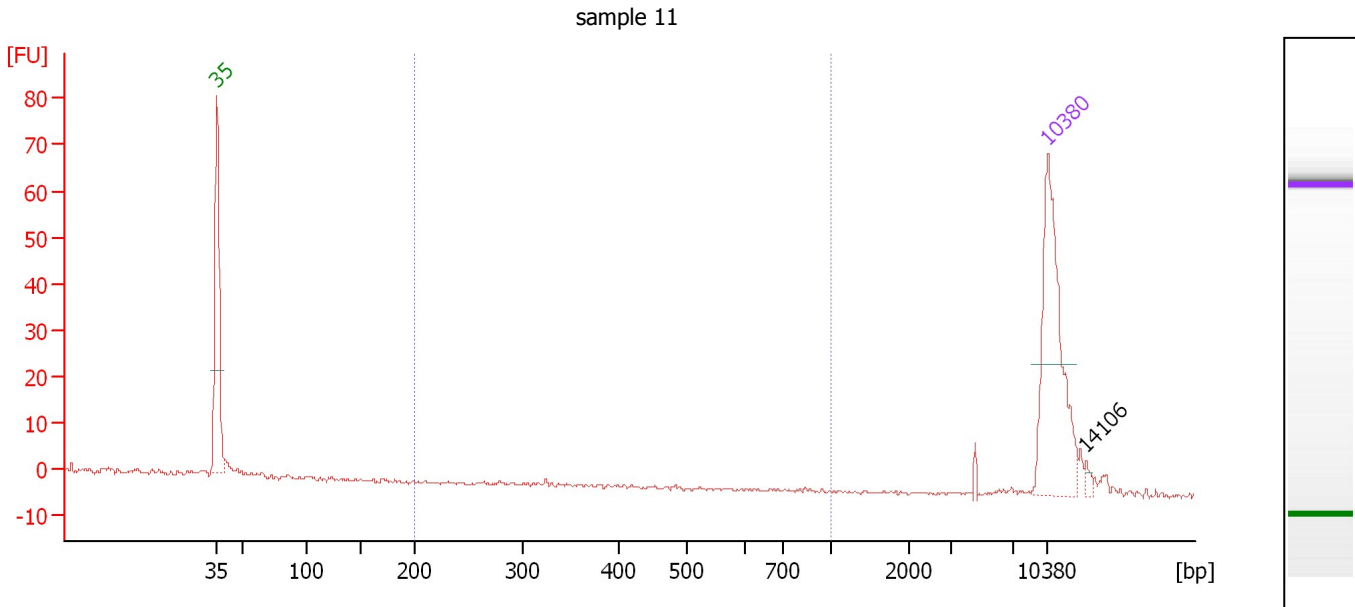
... Region table for sample 10 : smRNA pool

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	568	10,796.3	3,236.95	230.3	1	34.3	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 1 Corr. Area 1: 0.5
 Noise: 0.4

Peak table for sample 11 : sample 11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	14,106	0.00	0.0	

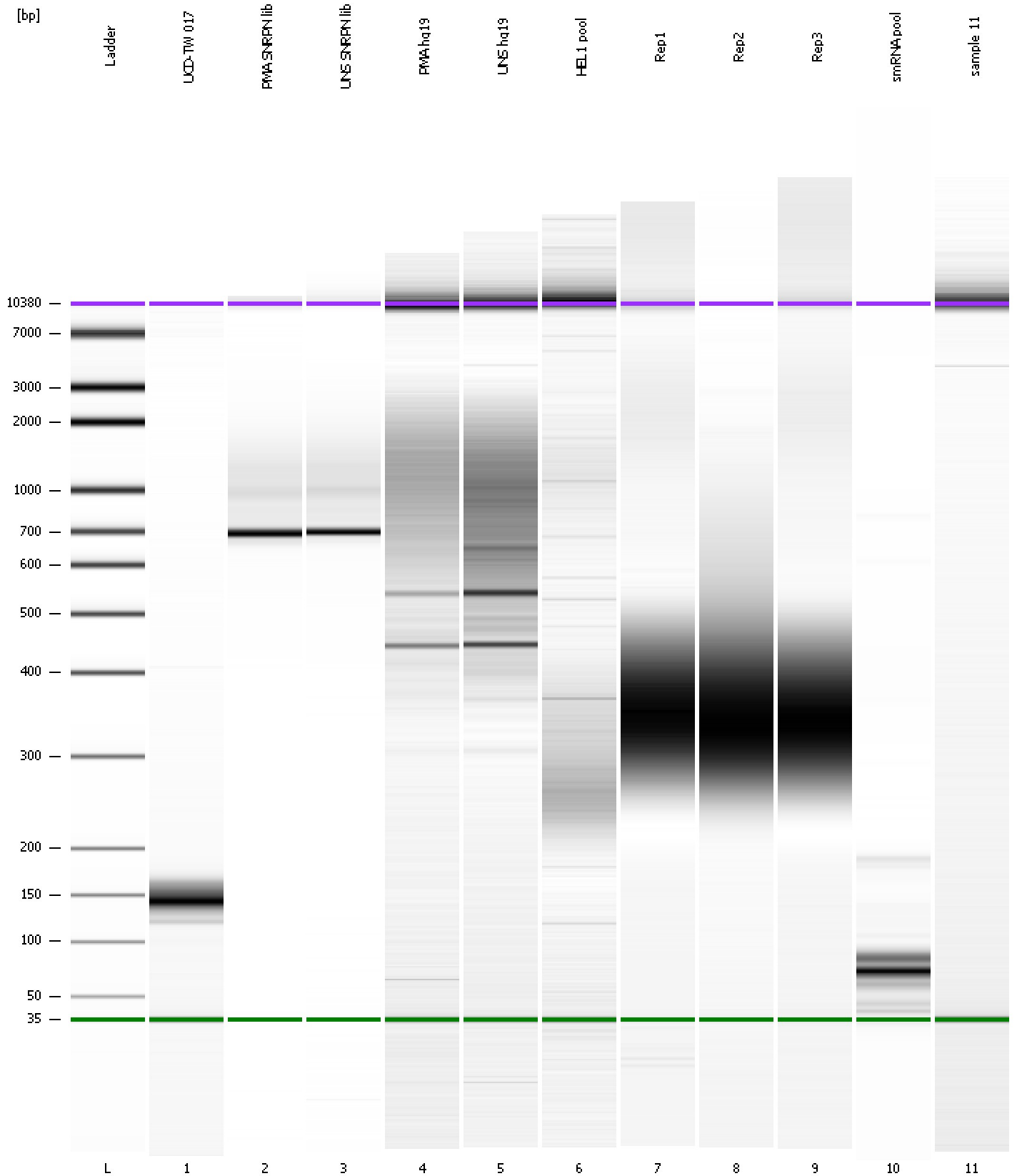
Region table for sample 11 : sample 11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	379	2.2	0.49	0.5	1	43.6	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
Modified: 6/22/2012 2:25:04 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad

Created: 6/22/2012 1:32:37 PM
 Modified: 6/22/2012 2:25:04 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		6/22/2012 2:13:57 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-22\2012-06-22_001.xad)		Instrument	Run		6/22/2012 1:32:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/22/2012 1:32:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/22/2012 1:32:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/22/2012 1:32:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/22/2012 1:32:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/22/2012 1:32:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/22/2012 1:32:43 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1