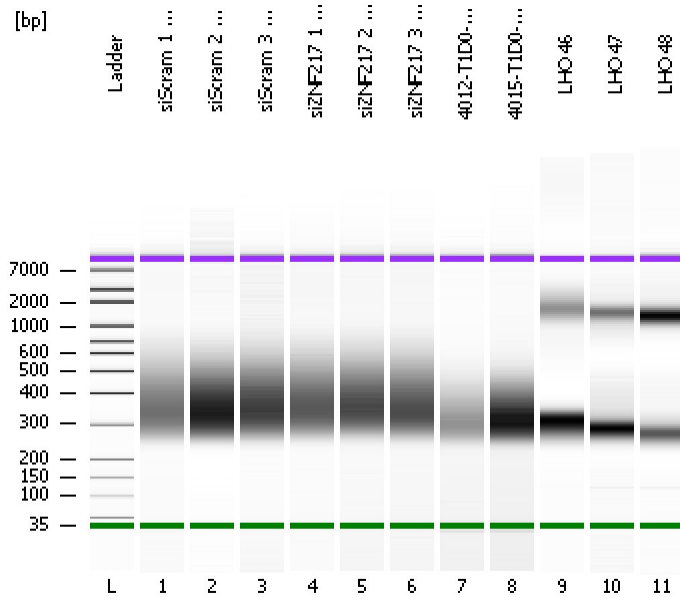


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
Modified: 7/17/2013 5:36:06 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

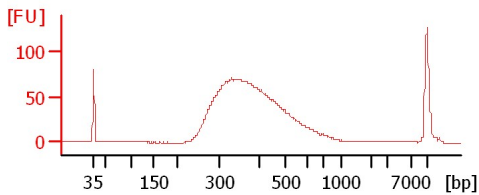
Assay Information:

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

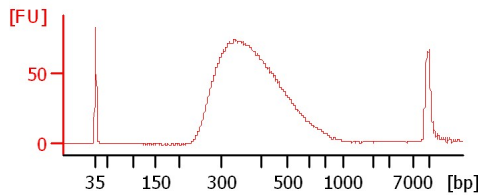
Chip Information:

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

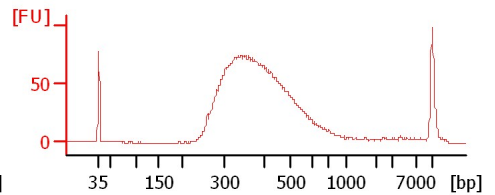
siScram 1 mRNA Lib 1:17



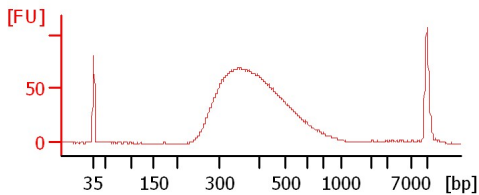
siScram 2 mRNA Lib 1:17



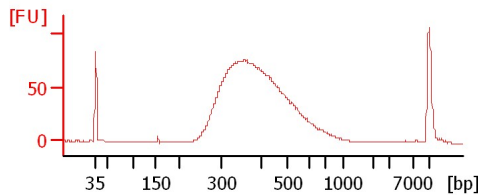
siScram 3 mRNA Lib 1:16



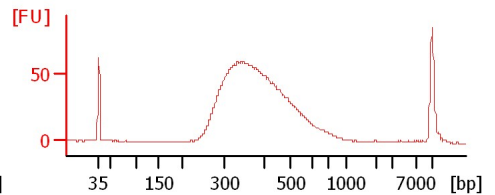
siZNF217 1 mRNA Lib 1:17



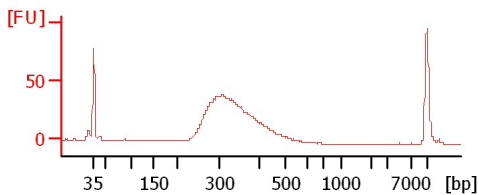
siZNF217 2 mRNA Lib 1:16



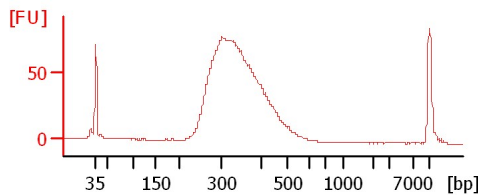
siZNF217 3 mRNA Lib 1:16



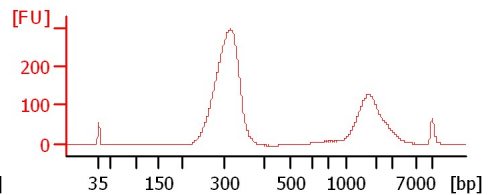
4012-T1D0-P4 mRNA Lib



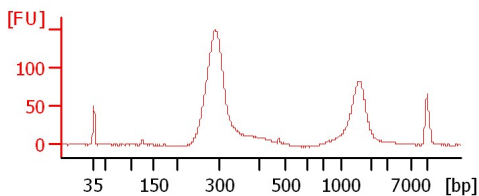
4015-T1D0-P4 mRNA Lib



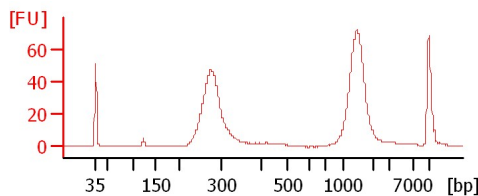
LHO 46



LHO 47



LHO 48



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
siScram 1 mRNA Lib 1:17		<input type="checkbox"/>	✓			
siScram 2 mRNA Lib 1:17		<input type="checkbox"/>	✓			
siScram 3 mRNA Lib 1:16		<input type="checkbox"/>	✓			
siZNF217 1 mRNA Lib 1:17		<input type="checkbox"/>	✓			
siZNF217 2 mRNA Lib 1:16		<input type="checkbox"/>	✓			
siZNF217 3 mRNA Lib 1:16		<input type="checkbox"/>	✓			
4012-T1D0-P4 mRNA Lib		<input type="checkbox"/>	✓			
4015-T1D0-P4 mRNA Lib		<input type="checkbox"/>	✓			
LHO 46		<input type="checkbox"/>	✓			
LHO 47		<input type="checkbox"/>	✓			
LHO 48		<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\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
Modified: 7/17/2013 5:36:06 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

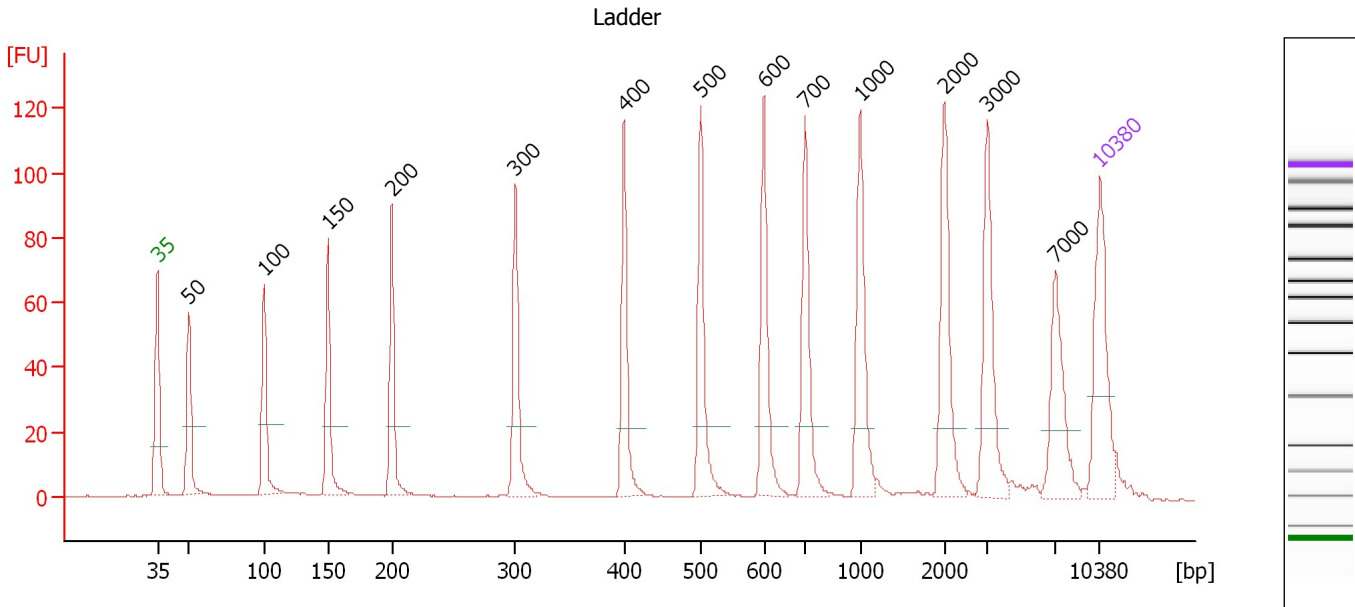
**Ladder**

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\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

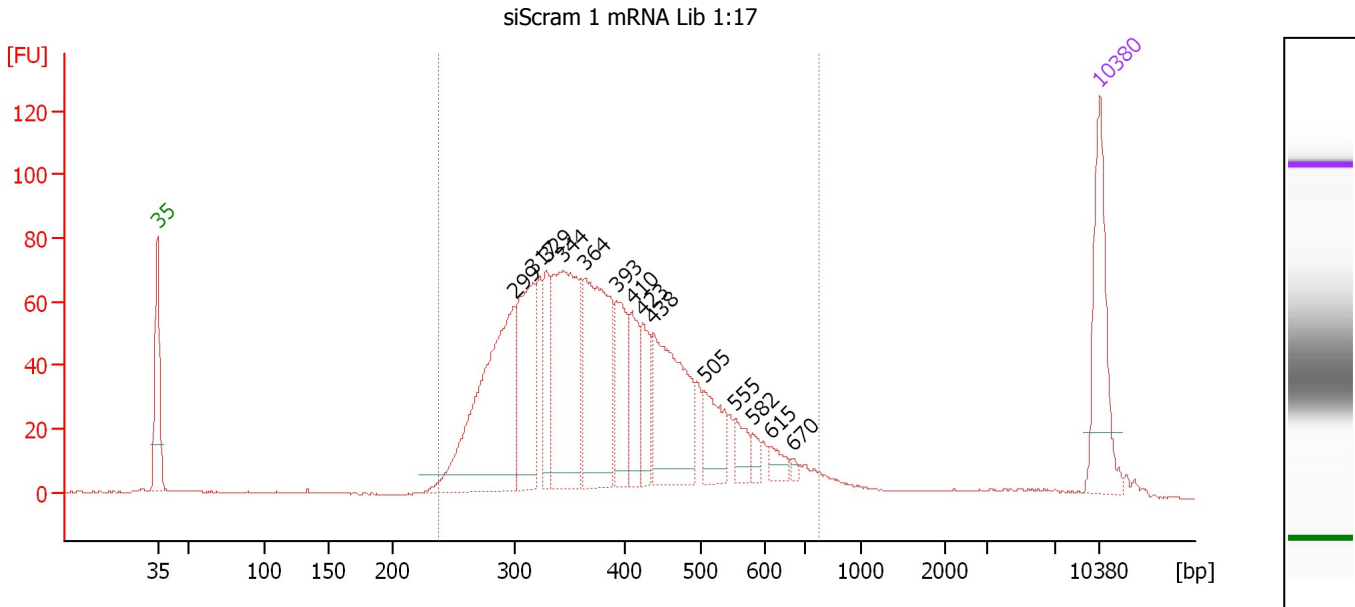
**Peak table for Ladder**

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\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : siScram 1 mRNA Lib 1:17**

Number of peaks found: 14                      Corr. Area 1: 1,562.0  
 Noise: 0.2

**Peak table for sample 1 : siScram 1 mRNA Lib 1:17**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	299	262.70	1,332.0	
3	317	130.97	626.9	
4	329	54.31	250.2	
5	344	200.80	884.7	
6	364	185.10	770.5	
7	393	72.93	281.2	
8	410	49.56	183.2	
9	423	45.73	163.6	
10	438	145.03	501.2	
11	505	48.62	145.8	
12	555	20.25	55.3	
13	582	10.43	27.1	
14	615	12.40	30.5	
15	670	3.91	8.8	
16	10,380	75.00	10.9	Upper Marker

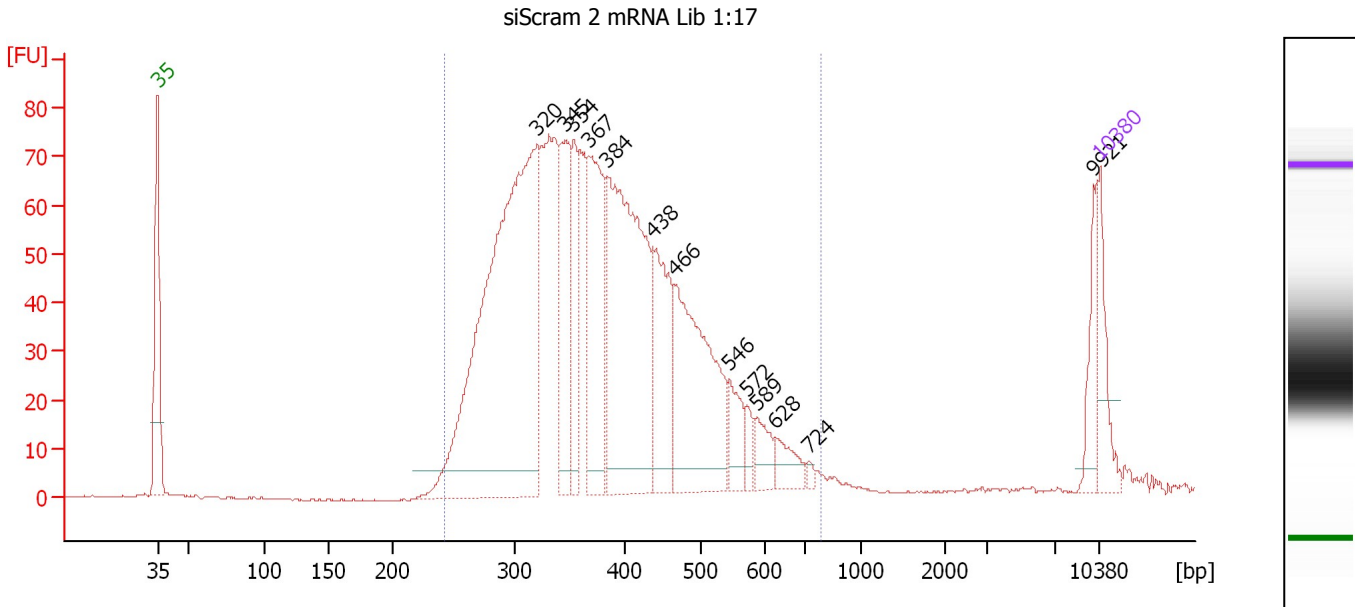
**Region table for sample 1 : siScram 1 mRNA Lib 1:17**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
238	775	394	5,987.4	1,438.38	1,562.0	95	25.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : siScram 2 mRNA Lib 1:17**

Number of peaks found: 13                      Corr. Area 1: 1,581.9  
 Noise: 0.2

**Peak table for sample 2 : siScram 2 mRNA Lib 1:17**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	320	1,180.84	5,585.7	
3	345	218.54	959.1	
4	354	145.27	622.6	
5	367	286.52	1,181.7	
6	384	650.31	2,566.0	
7	438	215.32	745.2	
8	466	384.85	1,251.0	
9	546	66.72	185.3	
10	572	26.38	69.8	
11	589	47.87	123.2	
12	628	44.45	107.3	
13	724	8.60	18.0	
14	9,921	63.07	9.6	
15	10,380	75.00	10.9	Upper Marker

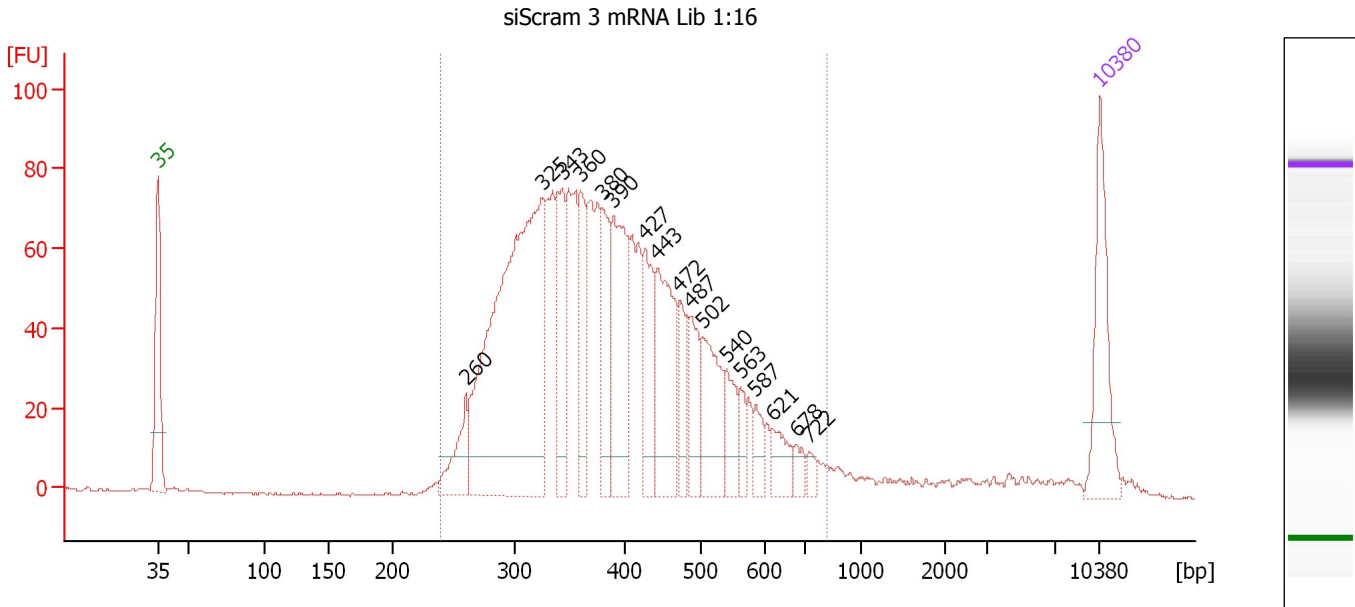
**Region table for sample 2 : siScram 2 mRNA Lib 1:17**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
242	781	387	16,545.3	3,933.90	1,581.9	96	24.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : siScram 3 mRNA Lib 1:16**

Height Threshold [FU] : 10

**Overall Results for sample 3 : siScram 3 mRNA Lib 1:16**

Number of peaks found: 17                      Corr. Area 1: 1,684.3  
 Noise: 0.3

**Peak table for sample 3 : siScram 3 mRNA Lib 1:16**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	260	55.88	326.1	
3	325	547.50	2,555.3	
4	343	95.67	422.7	
5	360	79.10	332.8	
6	380	71.89	287.0	
7	390	143.74	558.6	
8	427	76.01	269.7	
9	443	127.96	437.3	
10	472	46.49	149.3	
11	487	52.34	162.8	
12	502	85.50	257.9	
13	540	40.69	114.2	
14	563	19.58	52.7	
15	587	21.17	54.7	
16	621	28.97	70.7	
17	678	12.71	28.4	
18	722	9.42	19.8	
19	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**

... Region table for sample 3 : siScram 3 mRNA Lib 1:16

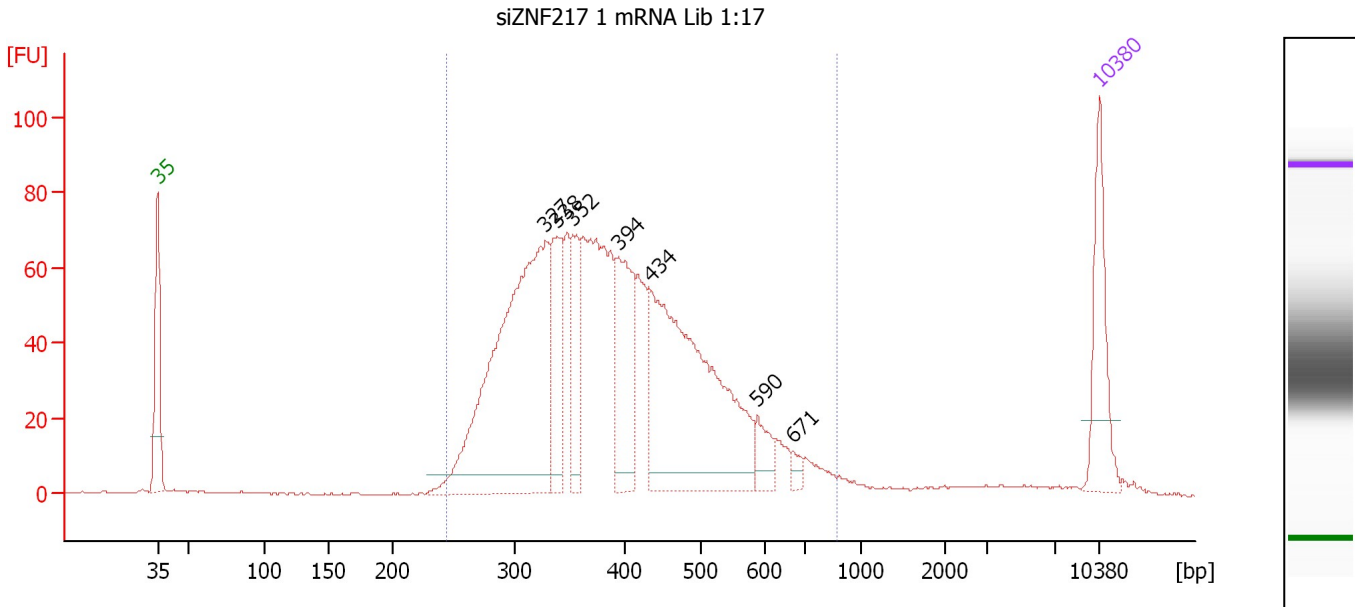
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
239	822	400	8,226.9	2,003.77	1,684.3	95	25.3	■



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : siZNF217 1 mRNA Lib 1:17**

Number of peaks found: 7                      Corr. Area 1: 1,534.7  
 Noise: 0.2

**Peak table for sample 4 : siZNF217 1 mRNA Lib 1:17**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	327	531.36	2,458.8	
3	338	115.07	515.1	
4	352	80.19	344.7	
5	394	133.87	514.4	
6	434	405.21	1,414.5	
7	590	29.84	76.6	
8	671	9.04	20.4	
9	10,380	75.00	10.9	Upper Marker

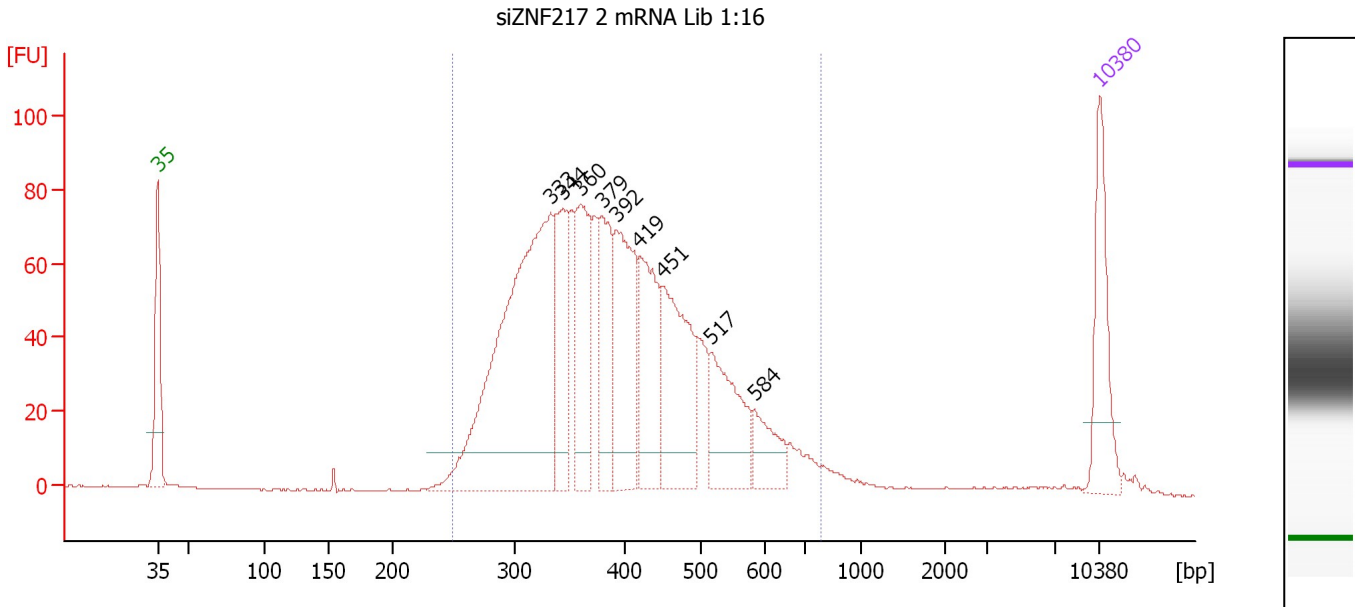
**Region table for sample 4 : siZNF217 1 mRNA Lib 1:17**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
244	873	405	7,430.0	1,831.86	1,534.7	94	25.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : siZNF217 2 mRNA Lib 1:16**

Height Threshold [FU] : 10

**Overall Results for sample 5 : siZNF217 2 mRNA Lib 1:16**

Number of peaks found: 9                      Corr. Area 1: 1,623.5  
 Noise: 0.2

**Peak table for sample 5 : siZNF217 2 mRNA Lib 1:16**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	333	535.88	2,440.7	
3	344	118.63	522.6	
4	360	142.38	599.5	
5	379	110.05	439.5	
6	392	170.75	659.4	
7	419	135.12	488.2	
8	451	165.71	556.3	
9	517	110.40	323.4	
10	584	48.86	126.7	
11	10,380	75.00	10.9	Upper Marker

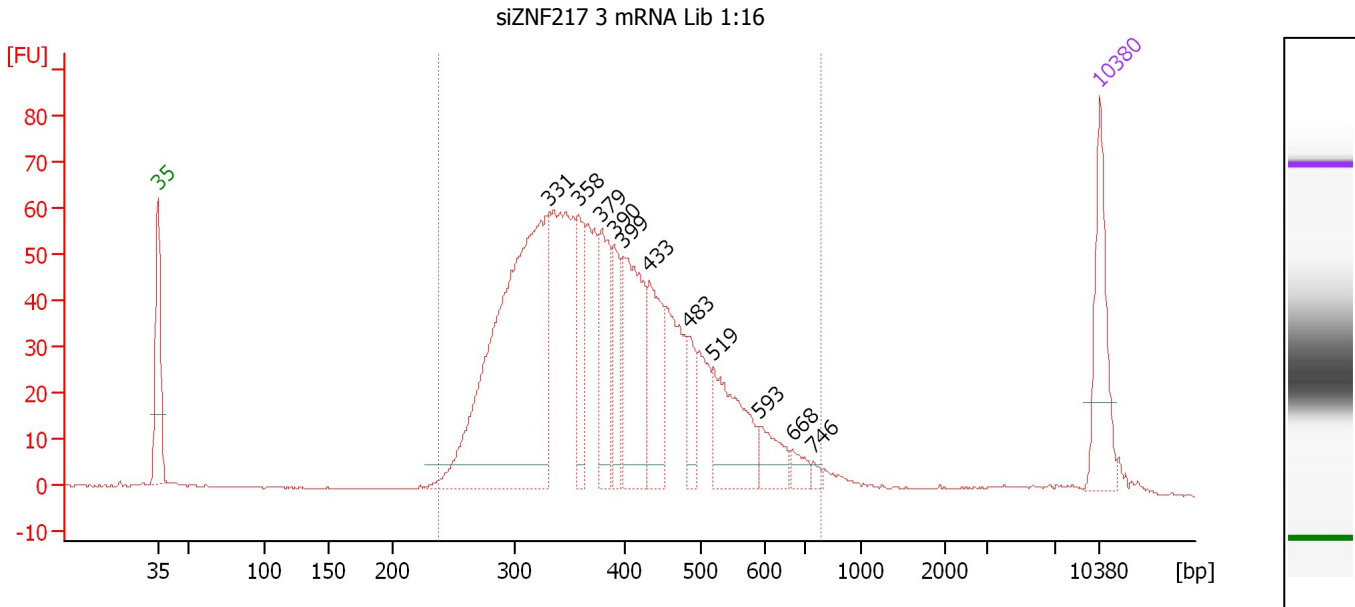
**Region table for sample 5 : siZNF217 2 mRNA Lib 1:16**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
249	781	403	7,214.2	1,787.85	1,623.5	95	24.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : siZNF217 3 mRNA Lib 1:16**

Number of peaks found: 11                      Corr. Area 1: 1,267.8  
 Noise: 0.2

**Peak table for sample 6 : siZNF217 3 mRNA Lib 1:16**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	331	592.89	2,717.4	
3	358	76.01	321.6	
4	379	98.69	394.5	
5	390	67.25	261.0	
6	399	159.89	606.6	
7	433	97.13	339.8	
8	483	37.93	118.9	
9	519	113.03	330.0	
10	593	36.56	93.4	
11	668	15.86	36.0	
12	746	5.99	12.2	
13	10,380	75.00	10.9	Upper Marker

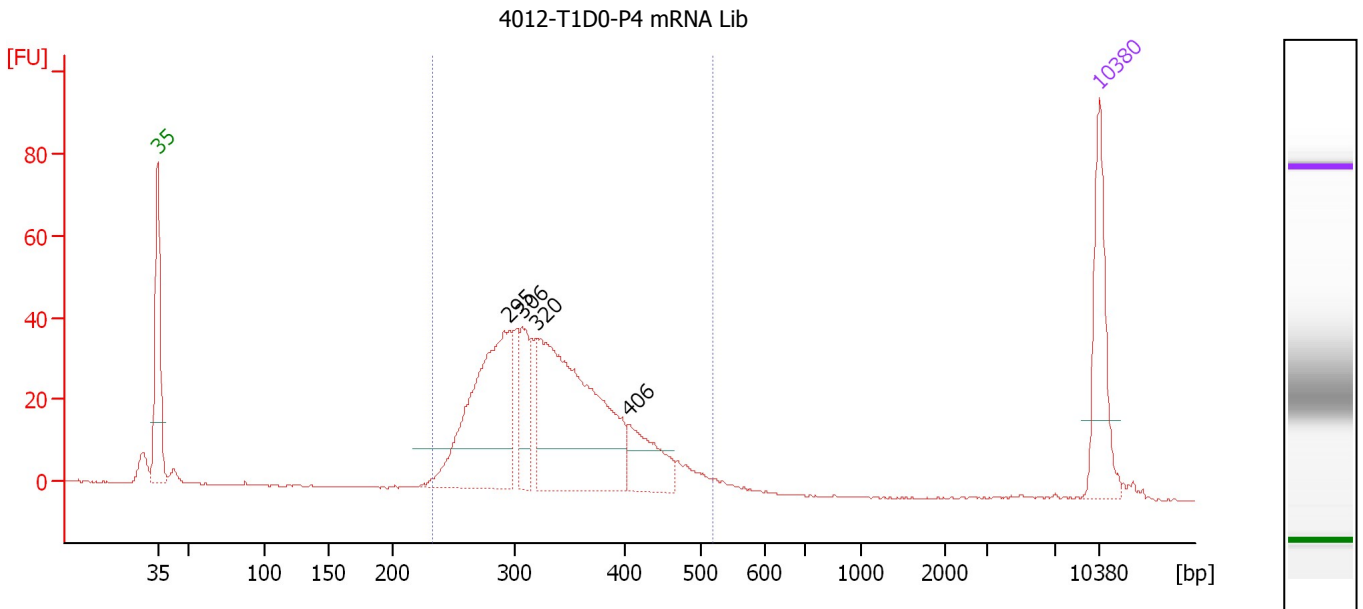
**Region table for sample 6 : siZNF217 3 mRNA Lib 1:16**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
237	783	396	7,951.8	1,931.71	1,267.8	96	24.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 7 : 4012-T1D0-P4 mRNA Lib**

Height Threshold [FU] : 10

**Overall Results for sample 7 : 4012-T1D0-P4 mRNA Lib**

Number of peaks found: 4                      Corr. Area 1: 610.5  
 Noise: 0.2

**Peak table for sample 7 : 4012-T1D0-P4 mRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	270.35	1,389.0	
3	306	67.07	331.7	
4	320	346.12	1,640.2	
5	406	68.68	256.3	
6	10,380	75.00	10.9	Upper Marker

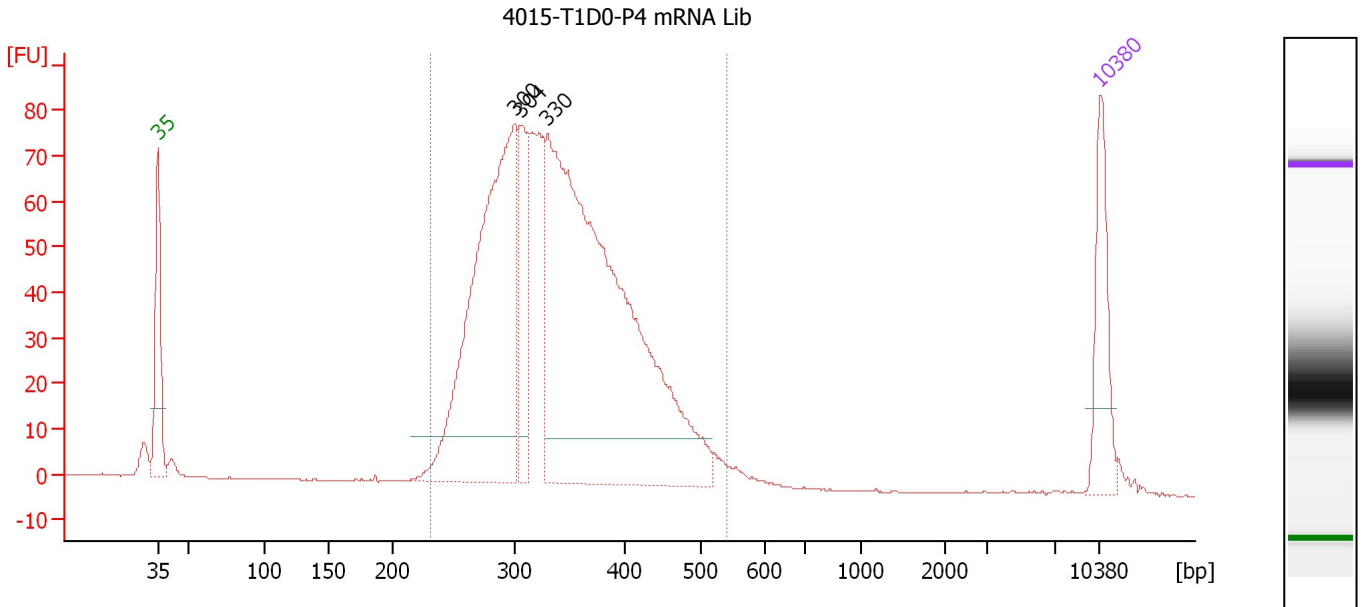
**Region table for sample 7 : 4012-T1D0-P4 mRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
233	519	336	3,830.3	817.01	610.5	94	17.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 8 : 4015-T1D0-P4 mRNA Lib**

Height Threshold [FU] : 10

**Overall Results for sample 8 : 4015-T1D0-P4 mRNA Lib**

Number of peaks found: 3                      Corr. Area 1: 1,299.3  
 Noise: 0.1

**Peak table for sample 8 : 4015-T1D0-P4 mRNA Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	300	591.81	2,989.9	
3	304	113.72	566.4	
4	330	982.45	4,517.4	
5	10,380	75.00	10.9	Upper Marker

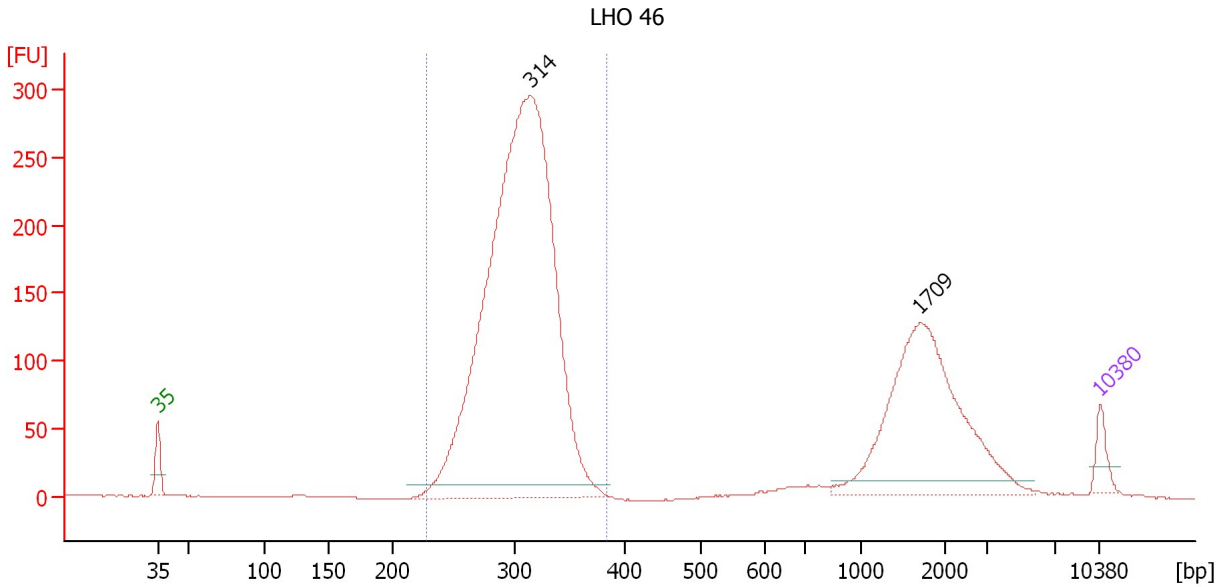
**Region table for sample 8 : 4015-T1D0-P4 mRNA Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	542	342	8,506.9	1,846.28	1,299.3	96	17.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 9 : LHO 46**

Height Threshold [FU] : 10

**Overall Results for sample 9 : LHO 46**

Number of peaks found: 2                      Corr. Area 1: 2,362.0  
 Noise: 0.1

**Peak table for sample 9 : LHO 46**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	314	5,333.56	25,724.5	
3	1,709	1,194.82	1,059.3	
4	10,380	75.00	10.9	Upper Marker

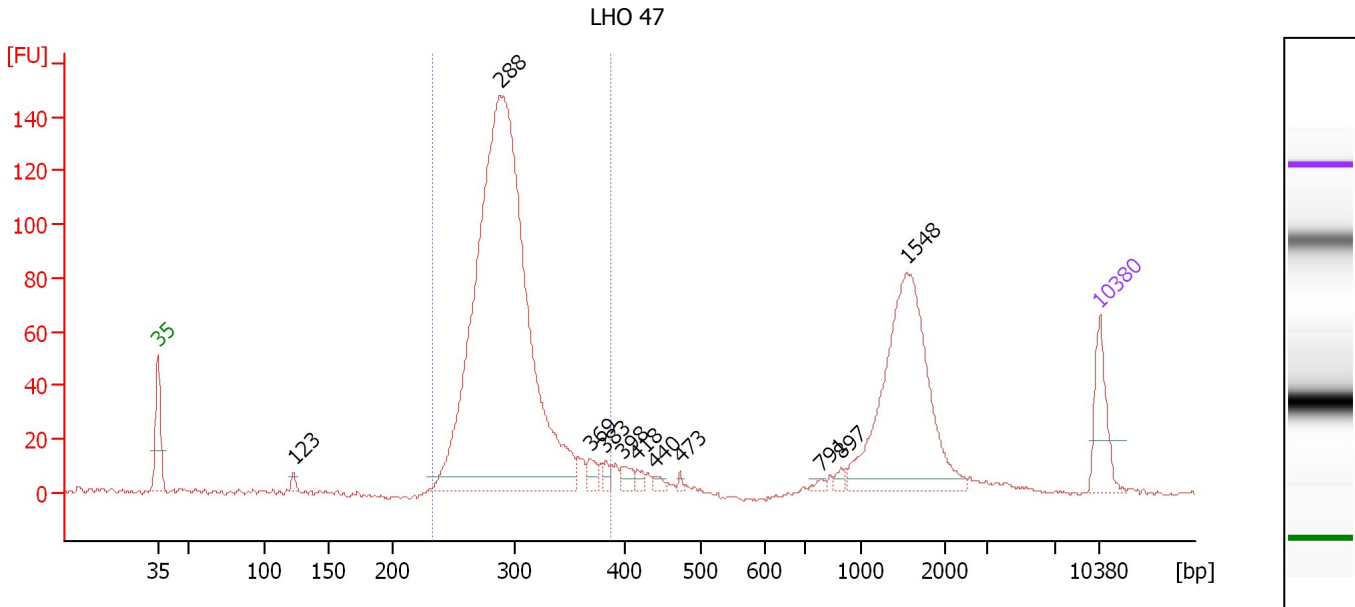
**Region table for sample 9 : LHO 46**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
228	385	304	26,860.8	5,343.54	2,362.0	75	8.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : LHO 47**

Number of peaks found: 11                      Corr. Area 1: 966.5  
 Noise: 0.4

**Peak table for sample 10 : LHO 47**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	123	11.40	140.2	
3	288	1,970.28	10,382.4	
4	369	25.49	104.6	
5	383	16.50	65.3	
6	398	21.91	83.4	
7	418	11.81	42.8	
8	440	11.04	38.0	
9	473	5.80	18.6	
10	791	7.81	15.0	
11	897	11.00	18.6	
12	1,548	455.42	445.8	
13	10,380	75.00	10.9	Upper Marker

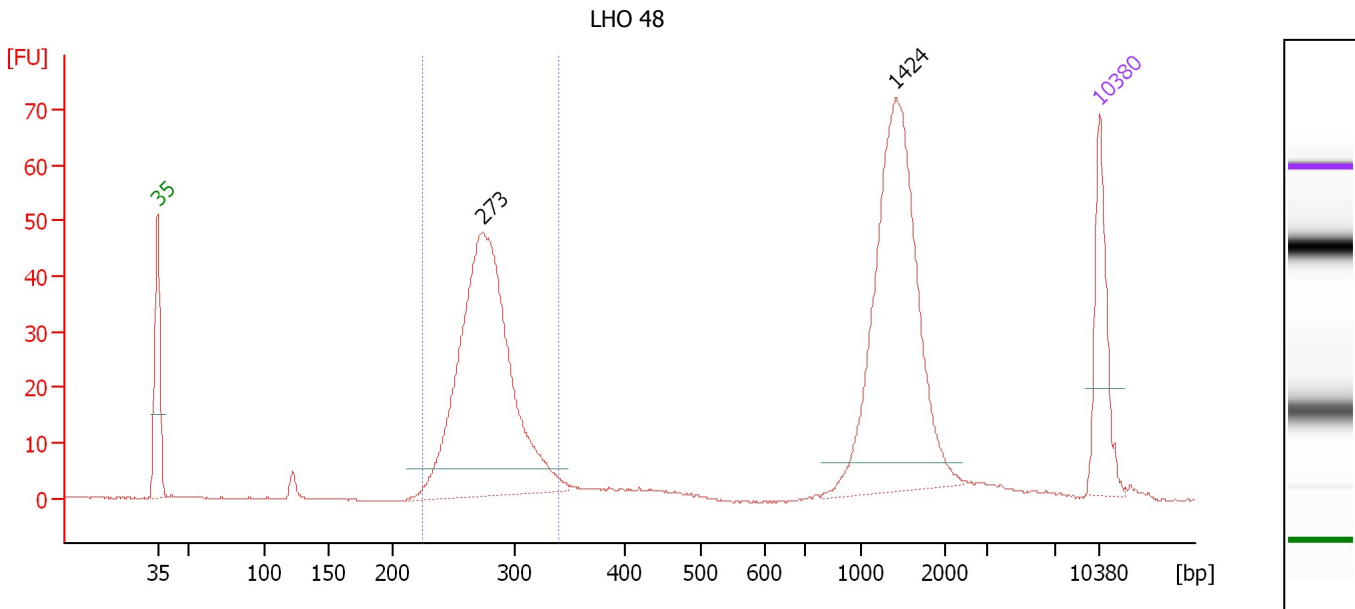
**Region table for sample 10 : LHO 47**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	388	294	10,573.0	2,032.68	966.5	70	9.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : LHO 48**

Number of peaks found: 2                      Corr. Area 1: 305.0  
 Noise: 0.1

**Peak table for sample 11 : LHO 48**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	273	614.38	3,413.7	
3	1,424	360.49	383.6	
4	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : LHO 48**

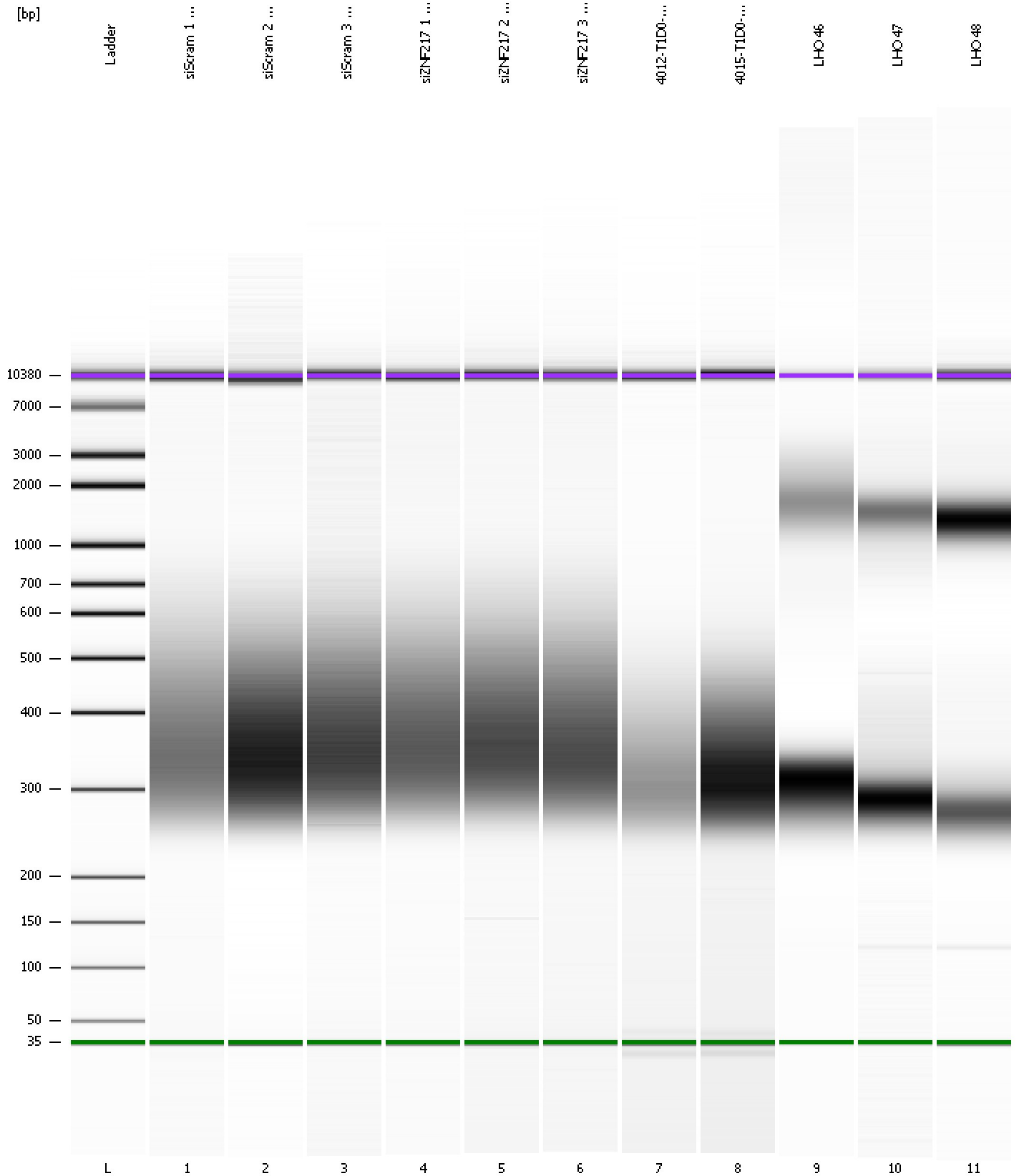
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
225	339	277	3,388.0	616.60	305.0	49	7.7	Blue



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
Modified: 7/17/2013 5:36:06 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-17\2013-07-17\_002.xad

Created: 7/17/2013 4:28:29 PM  
 Modified: 7/17/2013 5:36:06 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		7/17/2013 5:09:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-17\2013-07-17_002.xad)		Instrument	Run		7/17/2013 4:28:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/17/2013 4:28:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/17/2013 4:28:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/17/2013 4:28:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/17/2013 4:28:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/17/2013 4:28:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/17/2013 4:28:34 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1