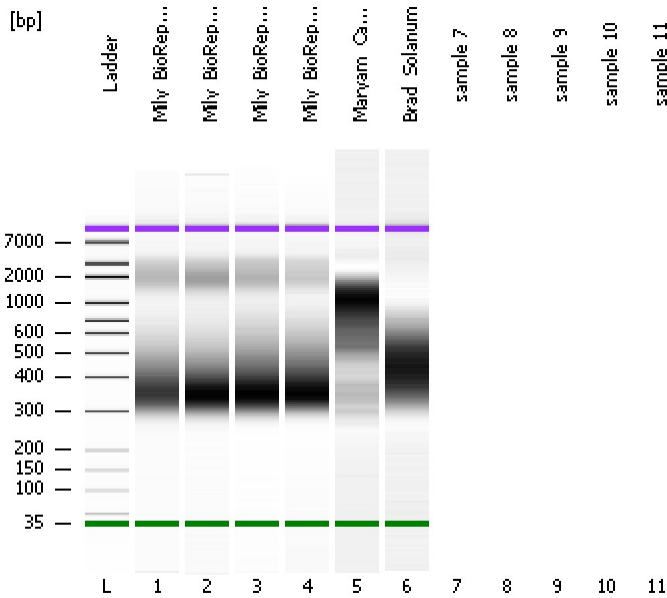


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
Modified: 6/20/2013 10:50:01 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

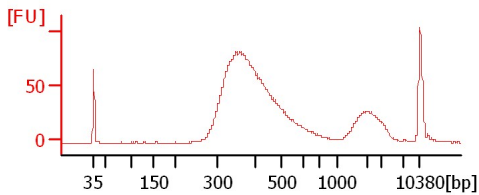
Assay Information:

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

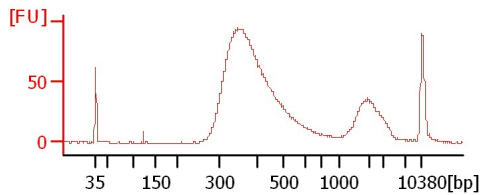
Chip Information:

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

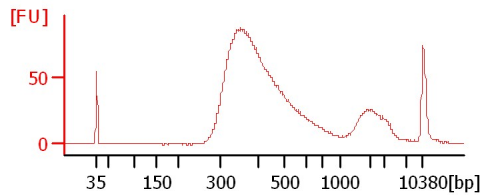
**Mily\_BioRep2pure**



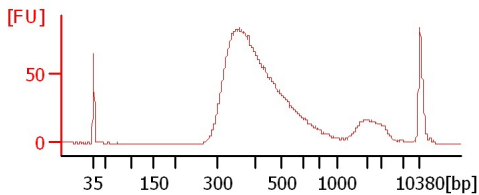
**Mily\_BioRep3pure**



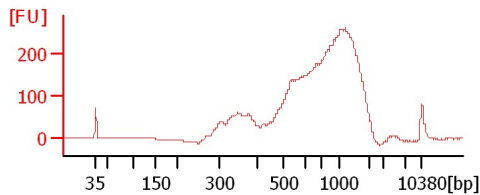
**Mily\_BioRep4pure**



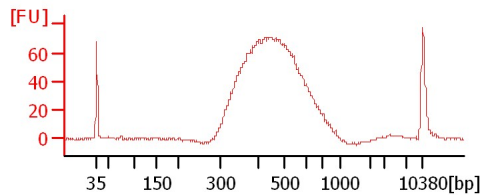
**Mily\_BioRep5pure**



**Maryam\_Cassava**



**Brad\_Solanum**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Mily_BioRep2pure		<input type="checkbox"/>	✓			
Mily_BioRep3pure		<input type="checkbox"/>	✓			
Mily_BioRep4pure		<input type="checkbox"/>	✓			
Mily_BioRep5pure		<input type="checkbox"/>	✓			
Maryam_Cassava		<input type="checkbox"/>	✓			
Brad_Solanum		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<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\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
Modified: 6/20/2013 10:50:01 AM

**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

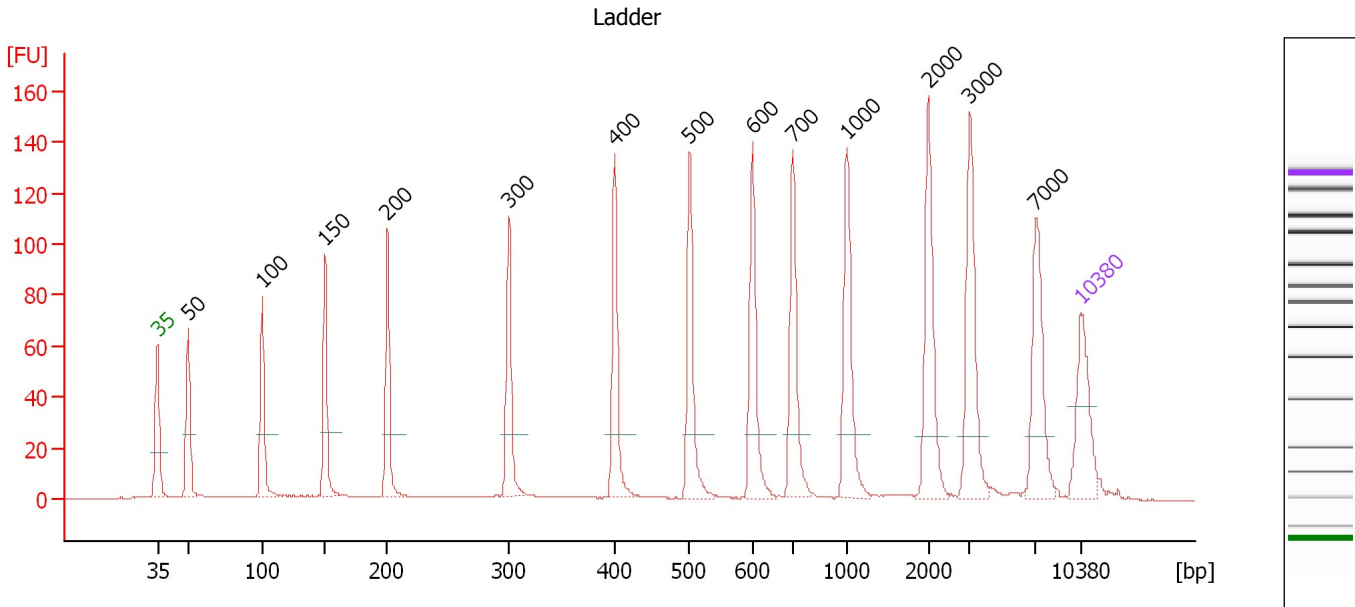
**Ladder**

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\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

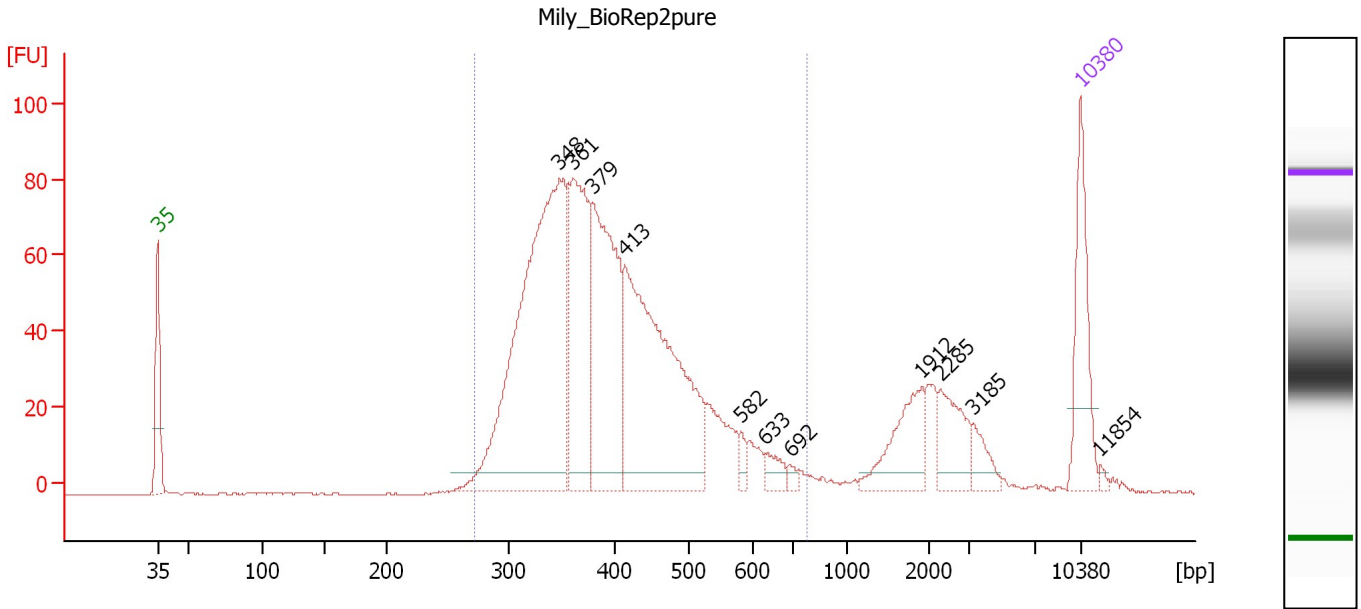
**Peak table for Ladder**

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\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Mily\_BioRep2pure**

Number of peaks found: 11                      Corr. Area 1: 1,361.7  
 Noise: 0.2

**Peak table for sample 1 : Mily\_BioRep2pure**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	348	555.37	2,419.4	
3	361	206.42	867.2	
4	379	259.80	1,038.4	
5	413	379.19	1,391.0	
6	582	10.51	27.4	
7	633	17.30	41.4	
8	692	6.66	14.6	
9	1,912	63.53	50.3	
10	2,285	48.74	32.3	
11	3,185	20.41	9.7	
12	10,380	75.00	10.9	Upper Marker
13	11,854	0.00	0.0	

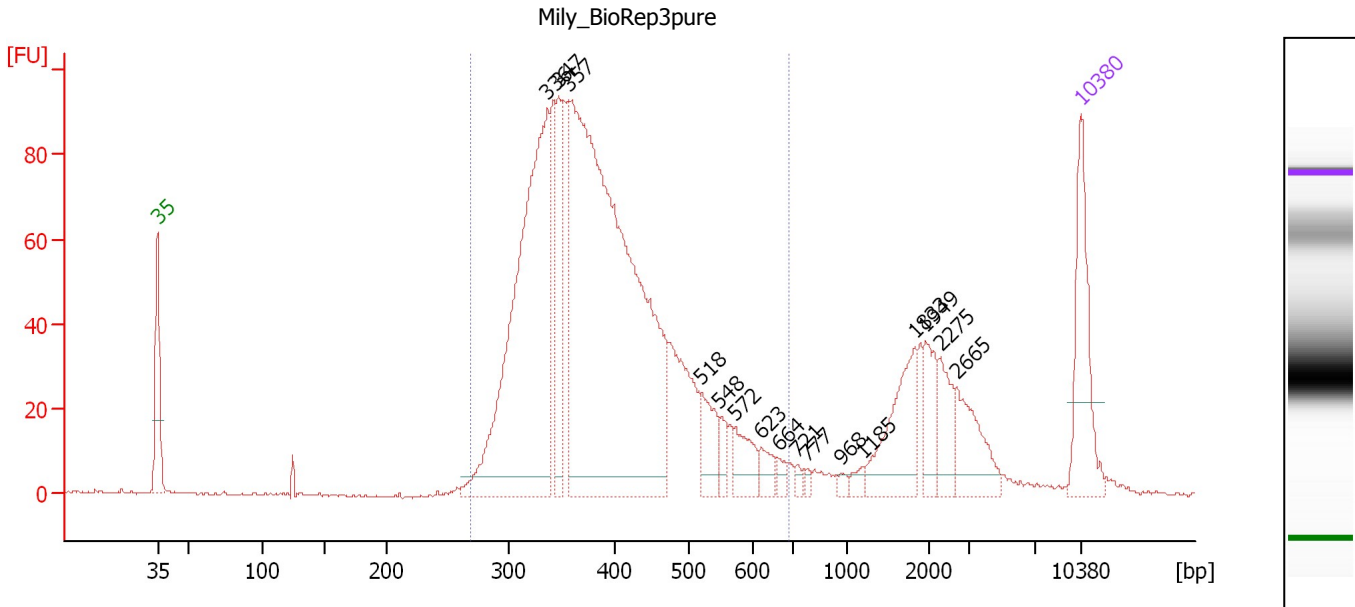
**Region table for sample 1 : Mily\_BioRep2pure**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
271	779	404	6,293.8	1,591.58	1,361.7	85	21.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Mily BioRep3pure**

Number of peaks found: 16                      Corr. Area 1: 1,432.1  
 Noise: 0.3

**Peak table for sample 2 : Mily BioRep3pure**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	336	493.95	2,224.4	
3	347	98.41	430.3	
4	357	856.43	3,638.1	
5	518	44.67	130.6	
6	548	15.64	43.3	
7	572	33.18	87.8	
8	623	16.57	40.3	
9	664	7.30	16.7	
10	721	5.90	12.4	
11	777	4.47	8.7	
12	968	5.00	7.8	
13	1,185	7.64	9.8	
14	1,833	72.59	60.0	
15	1,949	35.07	27.3	
16	2,275	32.43	21.6	
17	2,665	49.47	28.1	
18	10,380	75.00	10.9	Upper Marker

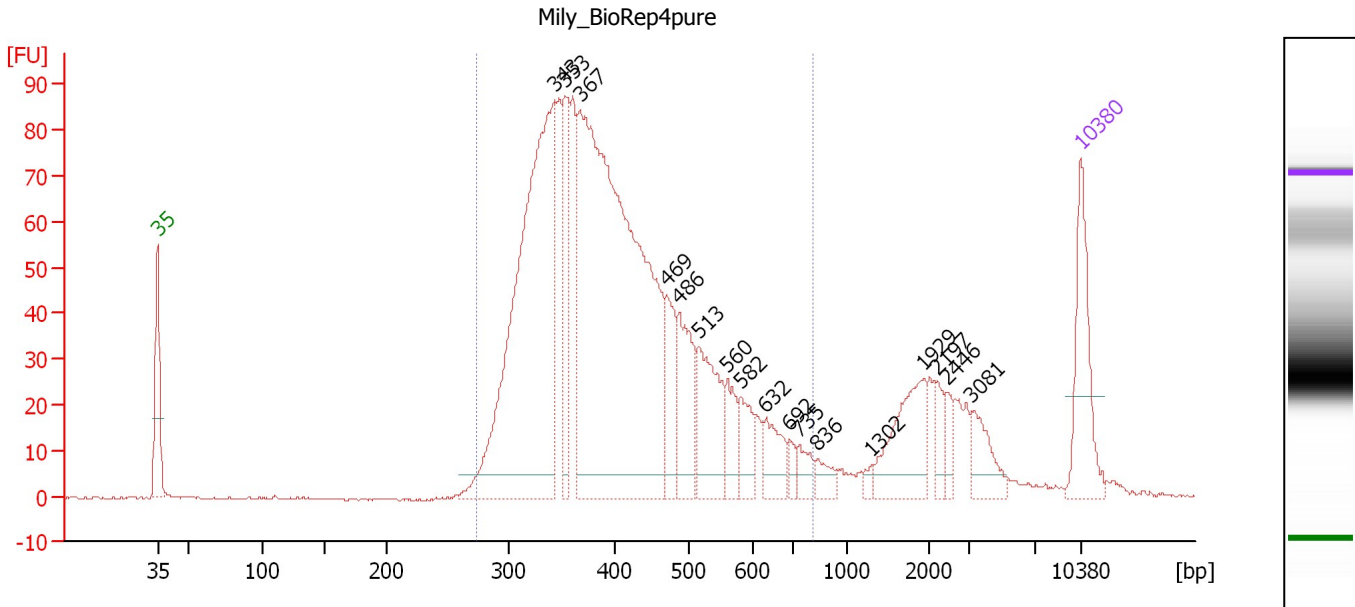
**Region table for sample 2 : Mily BioRep3pure**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
268	691	395	7,089.9	1,765.07	1,432.1	82	20.2	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Mily\_BioRep4pure**

Number of peaks found: 17      Corr. Area 1: 1,480.8  
 Noise: 0.2

**Peak table for sample 3 : Mily\_BioRep4pure**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	343	612.45	2,706.3	
3	353	108.81	466.8	
4	367	866.96	3,580.8	
5	469	62.33	201.5	
6	486	91.62	285.5	
7	513	106.50	314.3	
8	560	37.88	102.6	
9	582	38.81	101.1	
10	632	40.05	95.9	
11	692	11.55	25.3	
12	735	19.00	39.2	
13	836	16.78	30.4	
14	1,302	5.57	6.5	
15	1,929	77.66	61.0	
16	2,197	17.59	12.1	
17	2,446	15.15	9.4	
18	3,081	34.09	16.8	
19	10,380	75.00	10.9	Upper Marker

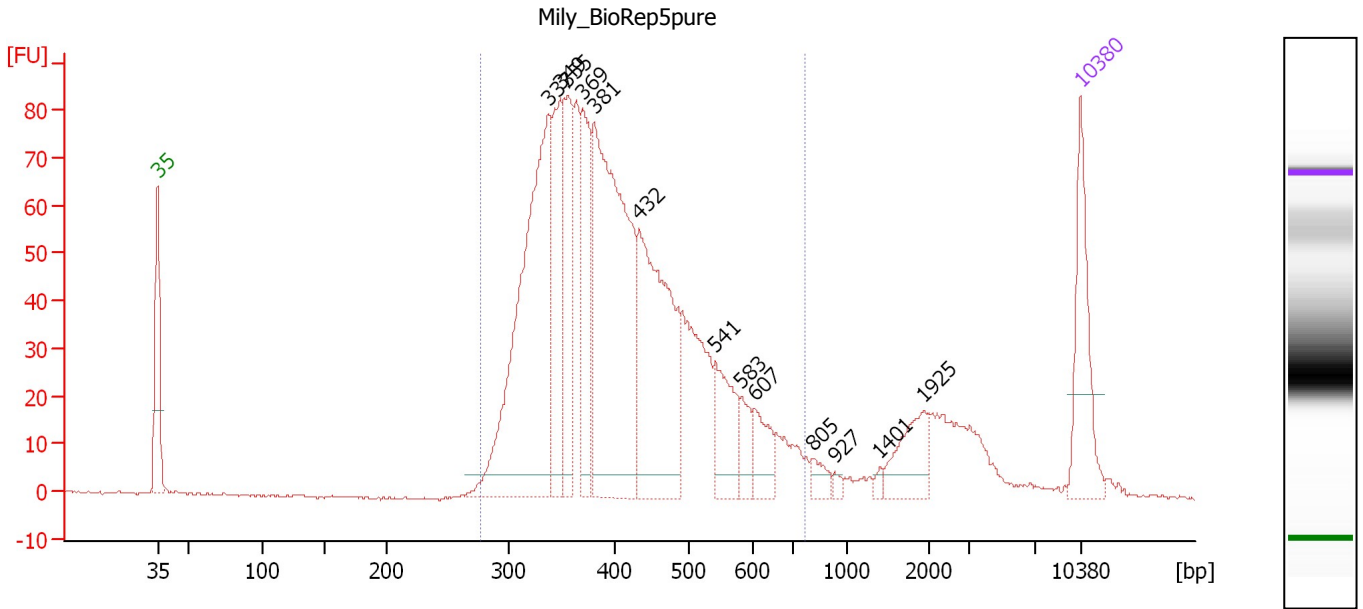
**Region table for sample 3 : Mily\_BioRep4pure**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
273	808	413	8,459.4	2,167.79	1,480.8	86	23.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Mily BioRep5pure**

Number of peaks found: 13      Corr. Area 1: 1,382.7  
 Noise: 0.3

**Peak table for sample 4 : Mily BioRep5pure**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	337	431.34	1,938.6	
3	349	133.30	579.2	
4	355	126.51	539.9	
5	369	116.74	479.5	
6	381	406.89	1,617.8	
7	432	263.00	922.1	
8	541	70.60	197.7	
9	583	26.04	67.7	
10	607	36.52	91.2	
11	805	14.08	26.5	
12	927	4.24	6.9	
13	1,401	4.53	4.9	
14	1,925	45.77	36.0	
15	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : Mily BioRep5pure**

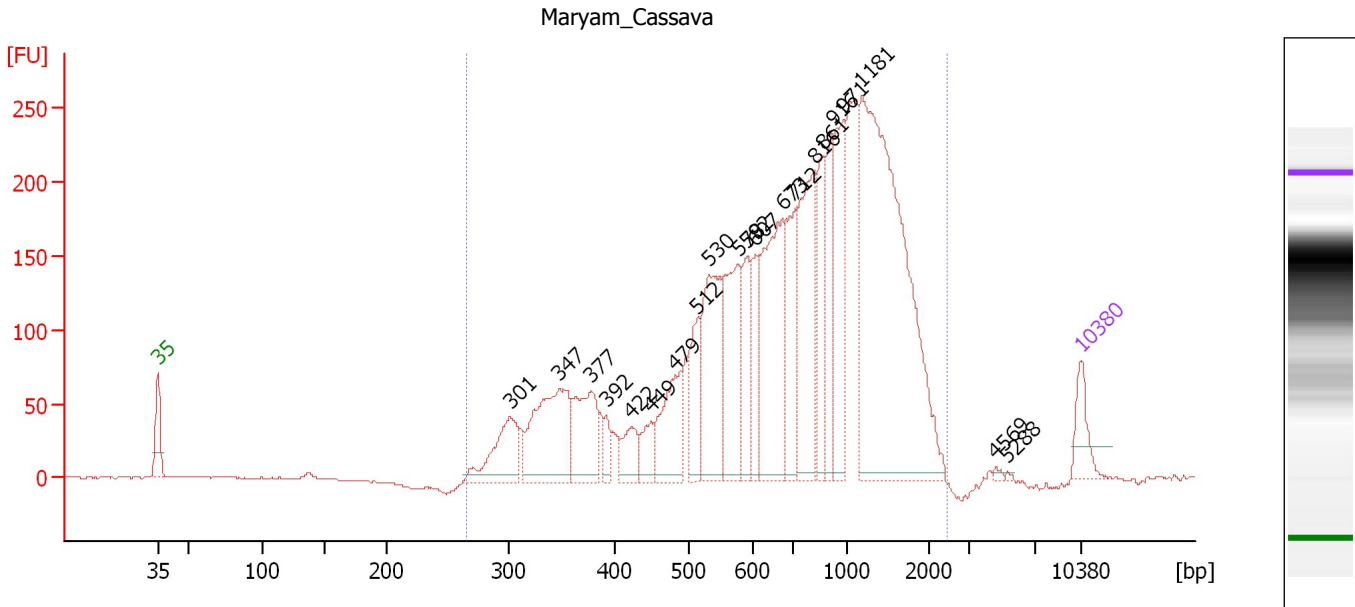
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
277	769	415	7,197.3	1,863.25	1,382.7	89	22.1	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Maryam Cassava**

Number of peaks found: 21                      Corr. Area 1: 4,484.5  
 Noise: 0.2

**Peak table for sample 5 : Maryam Cassava**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	301	231.48	1,165.6	
3	347	411.78	1,796.0	
4	377	243.85	979.0	
5	392	56.28	217.8	
6	422	92.67	332.6	
7	449	78.88	266.3	
8	479	224.16	709.2	
9	512	158.05	468.1	
10	530	389.98	1,114.0	
11	578	302.77	793.7	
12	592	149.95	383.9	
13	607	139.91	349.1	
14	673	484.92	1,091.3	
15	712	229.79	488.7	
16	816	410.34	761.9	
17	861	197.30	347.2	
18	916	186.00	307.6	
19	971	262.96	410.1	
20	1,181	1,258.21	1,614.2	
21	4,569	6.00	2.0	
22	5,288	2.67	0.8	
23	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary Continued ...**

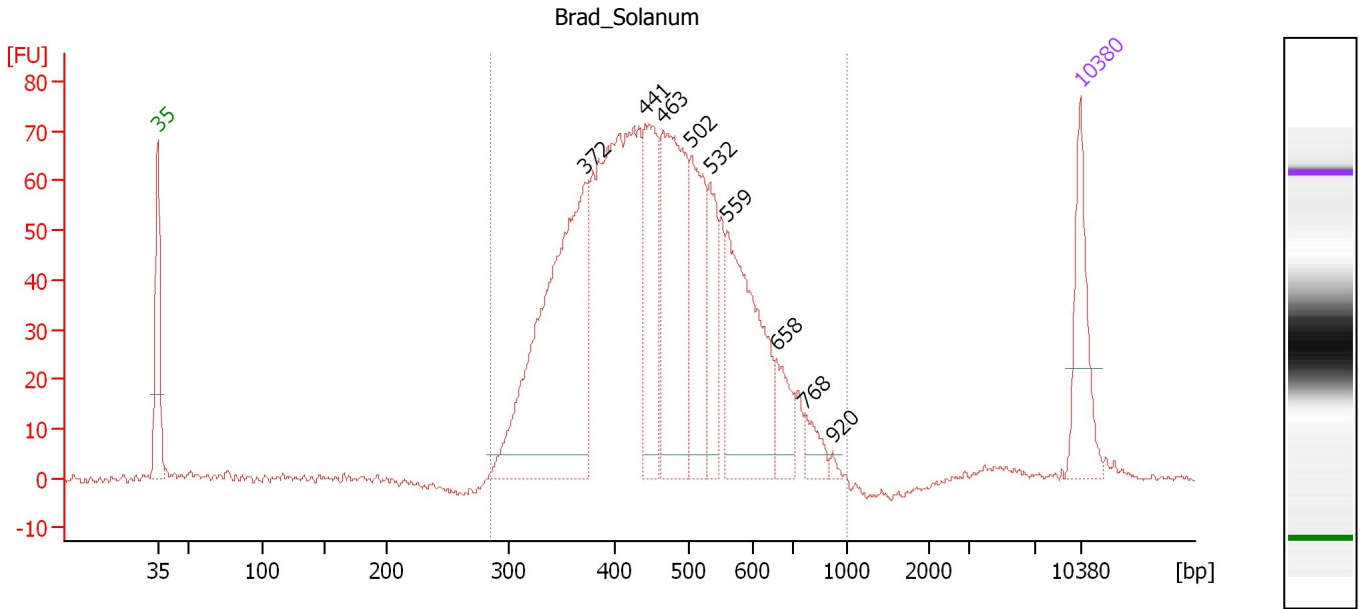
... Region table for sample 5 : Maryam\_Cassava

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Co lor
265	2,425	881	13,953.5	5,851.20	4,484.5	99	49.7	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Brad\_Solanum**

Number of peaks found: 9                      Corr. Area 1: 1,406.5  
 Noise: 0.7

**Peak table for sample 6 : Brad\_Solanum**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	372	478.98	1,950.3	
3	441	164.83	566.9	
4	463	265.26	867.9	
5	502	143.70	434.0	
6	532	80.77	229.9	
7	559	221.16	599.3	
8	658	50.38	116.0	
9	768	24.85	49.1	
10	920	4.52	7.4	
11	10,380	75.00	10.9	Upper Marker

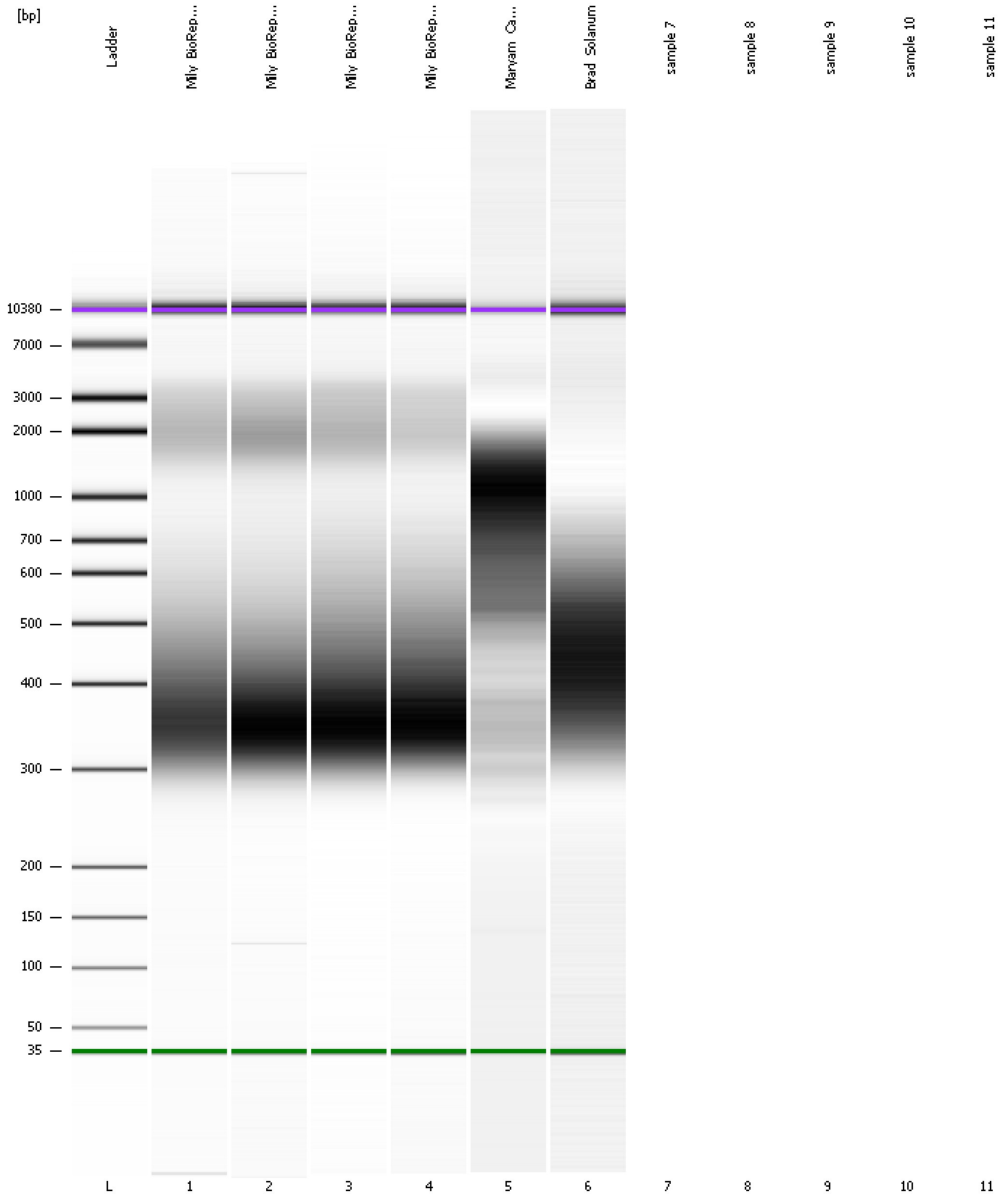
**Region table for sample 6 : Brad\_Solanum**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
284	1,000	466	7,027.3	2,025.34	1,406.5	99	23.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
Modified: 6/20/2013 10:50:01 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
Modified: 6/20/2013 10:50:01 AM

**Invalid Samples**

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-20\2013-06-20\_002.xad

Created: 6/20/2013 10:20:13 AM  
 Modified: 6/20/2013 10:50:01 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 7)		Instrument	Run		6/20/2013 10:47:14 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-20\2013-06-20_002.xad)		Instrument	Run		6/20/2013 10:20:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/20/2013 10:20:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/20/2013 10:20:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/20/2013 10:20:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/20/2013 10:20:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/20/2013 10:20:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/20/2013 10:20:18 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1