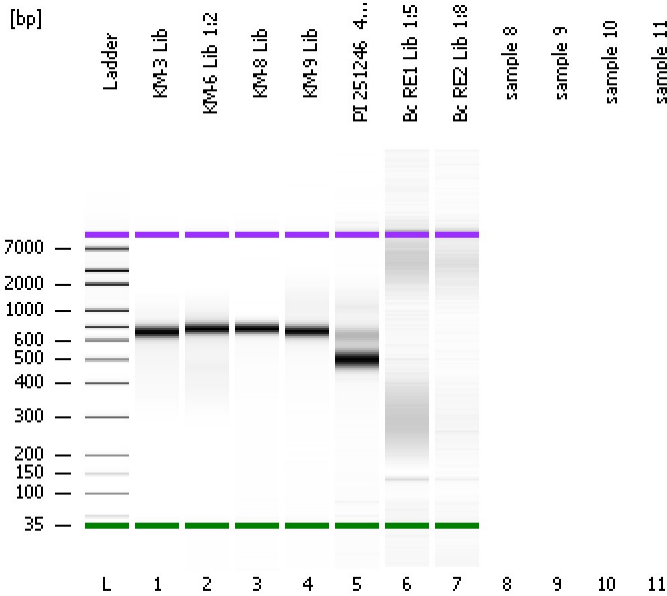


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
Modified: 11/16/2012 5:02:01 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

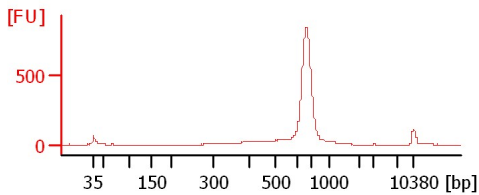
Assay Information:

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

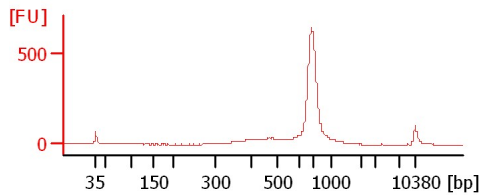
Chip Information:

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

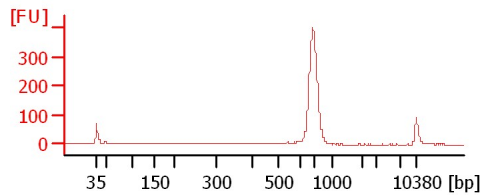
**KM-3 Lib**



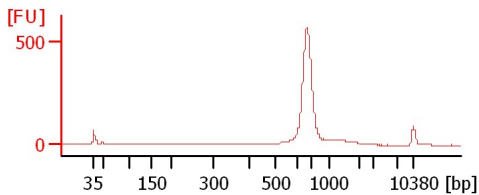
**KM-6 Lib 1:2**



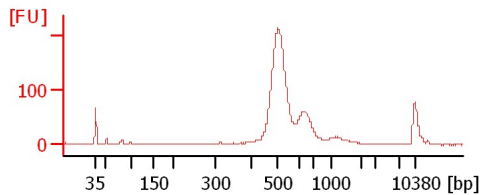
**KM-8 Lib**



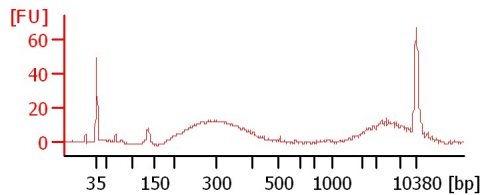
**KM-9 Lib**



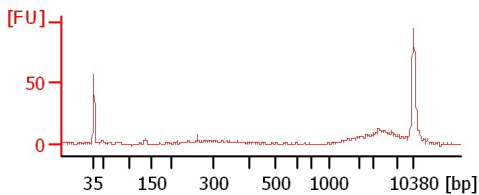
**PI 251246\_480**



**Bc RE1 Lib 1:5**



**Bc RE2 Lib 1:8**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
KM-3 Lib		<input type="checkbox"/>	✓			
KM-6 Lib 1:2		<input type="checkbox"/>	✓			
KM-8 Lib		<input type="checkbox"/>	✓			
KM-9 Lib		<input type="checkbox"/>	✓			
PI 251246_480		<input type="checkbox"/>	✓			
Bc RE1 Lib 1:5		<input type="checkbox"/>	✓			
Bc RE2 Lib 1:8		<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\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
Modified: 11/16/2012 5:02:01 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

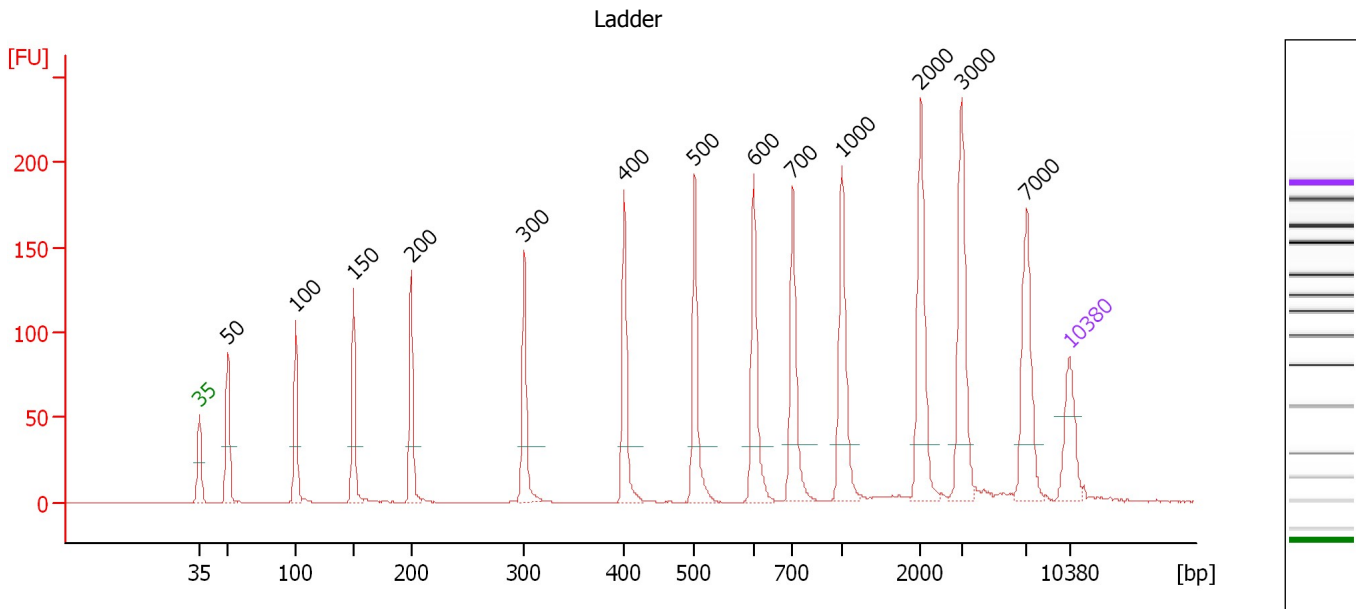
**Ladder**

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\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

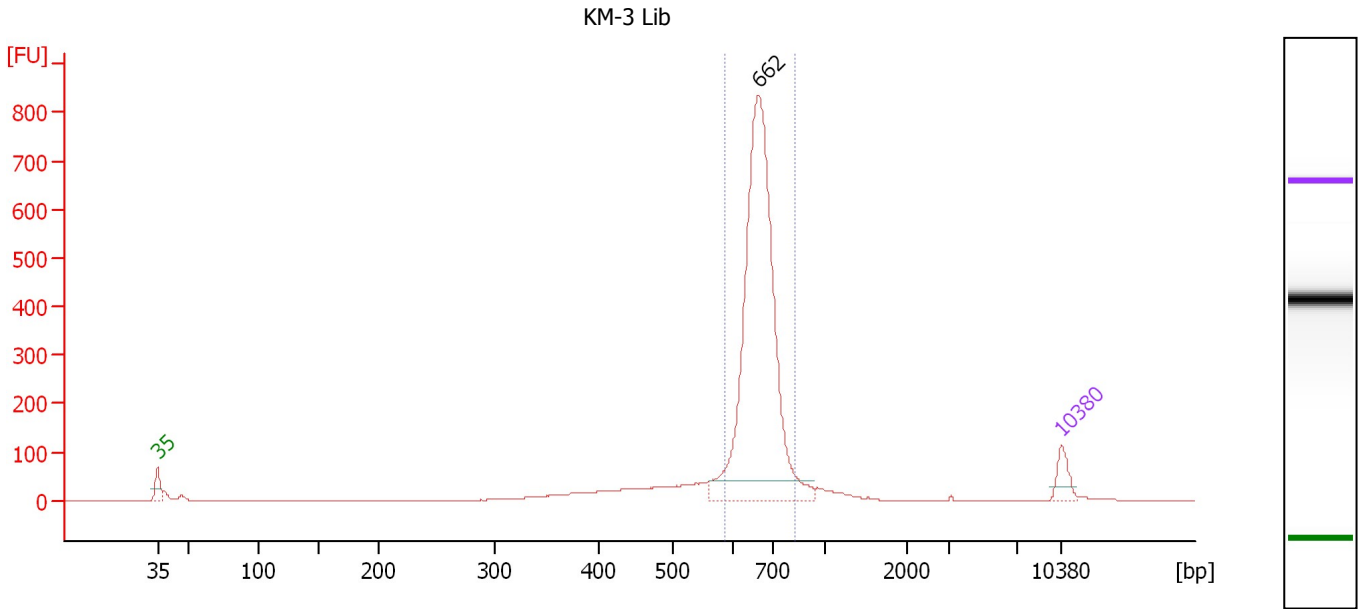
**Peak table for Ladder**

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\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 1 : KM-3 Lib**

Height Threshold [FU] : 40

**Overall Results for sample 1 : KM-3 Lib**

Number of peaks found: 1                      Corr. Area 1: 2,442.3  
 Noise: 0.2

**Peak table for sample 1 : KM-3 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	662	2,384.89	5,461.7	
3	10,380	75.00	10.9	Upper Marker

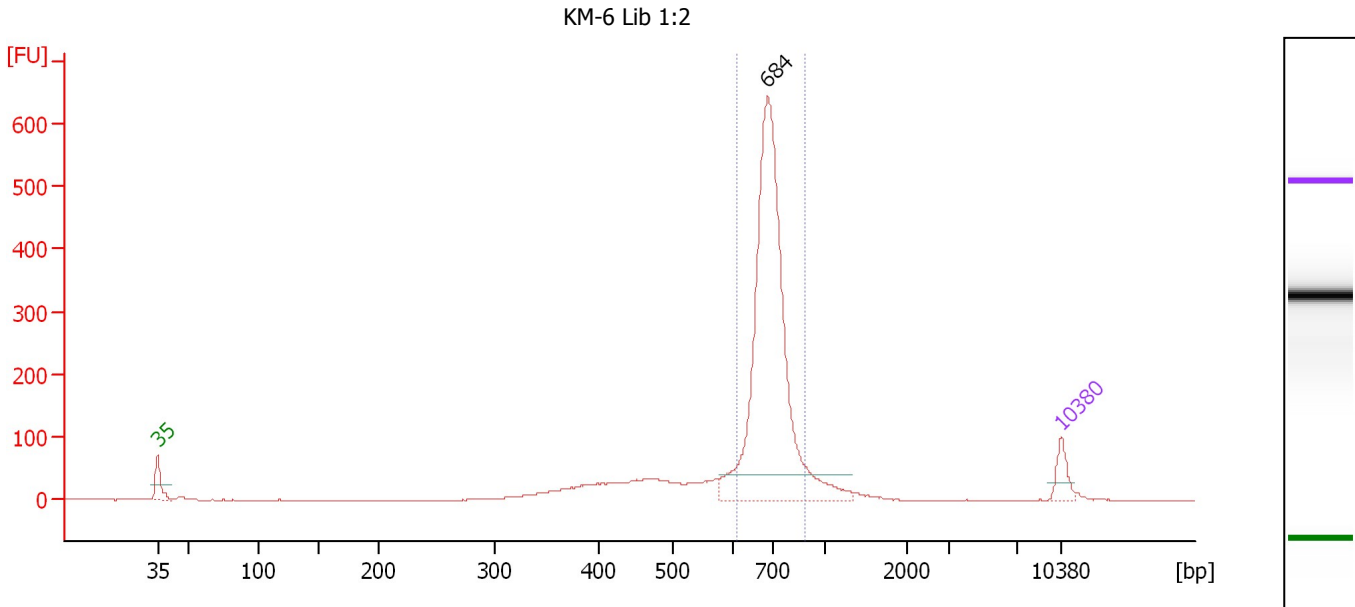
**Region table for sample 1 : KM-3 Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
587	821	667	5,137.1	2,255.13	2,442.3	78	5.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 2 : KM-6 Lib 1:2**

Height Threshold [FU] : 40

**Overall Results for sample 2 : KM-6 Lib 1:2**

Number of peaks found: 1                      Corr. Area 1: 1,745.6  
 Noise: 0.3

**Peak table for sample 2 : KM-6 Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	684	2,246.85	4,978.9	
3	10,380	75.00	10.9	Upper Marker

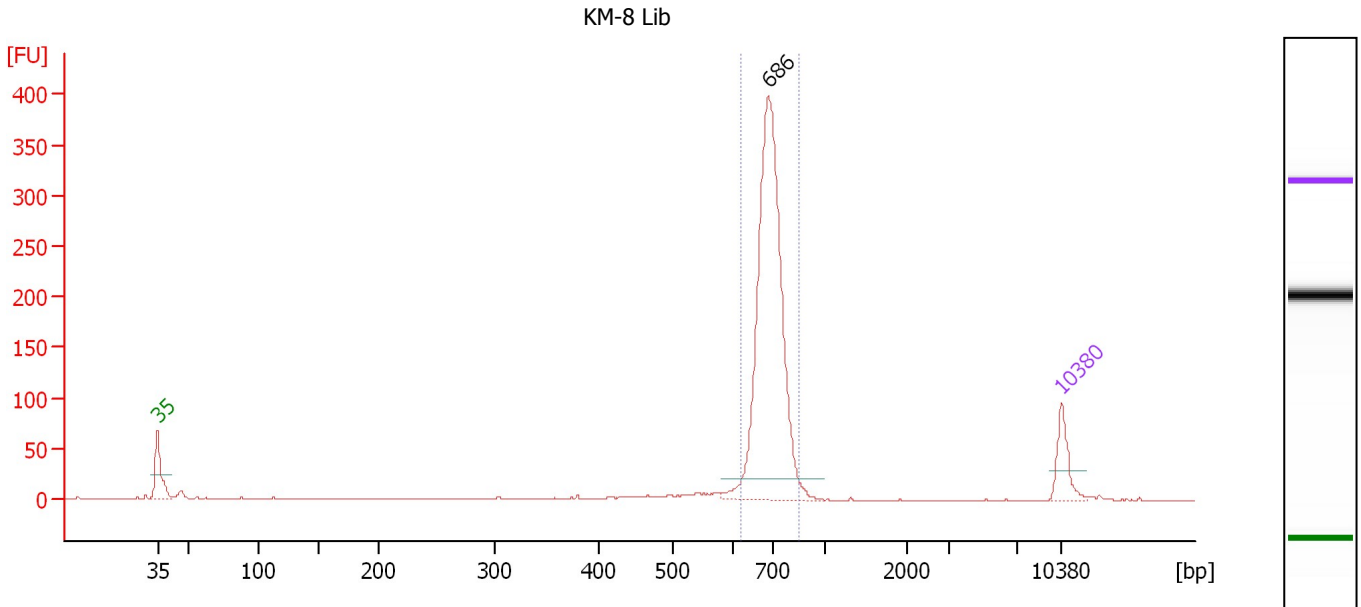
**Region table for sample 2 : KM-6 Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
608	889	701	4,358.3	2,007.85	1,745.6	70	7.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : KM-8 Lib**

Height Threshold [FU] : 20

**Overall Results for sample 3 : KM-8 Lib**

Number of peaks found: 1                      Corr. Area 1: 959.0  
 Noise: 0.2

**Peak table for sample 3 : KM-8 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	686	1,172.70	2,591.8	
3	10,380	75.00	10.9	Upper Marker

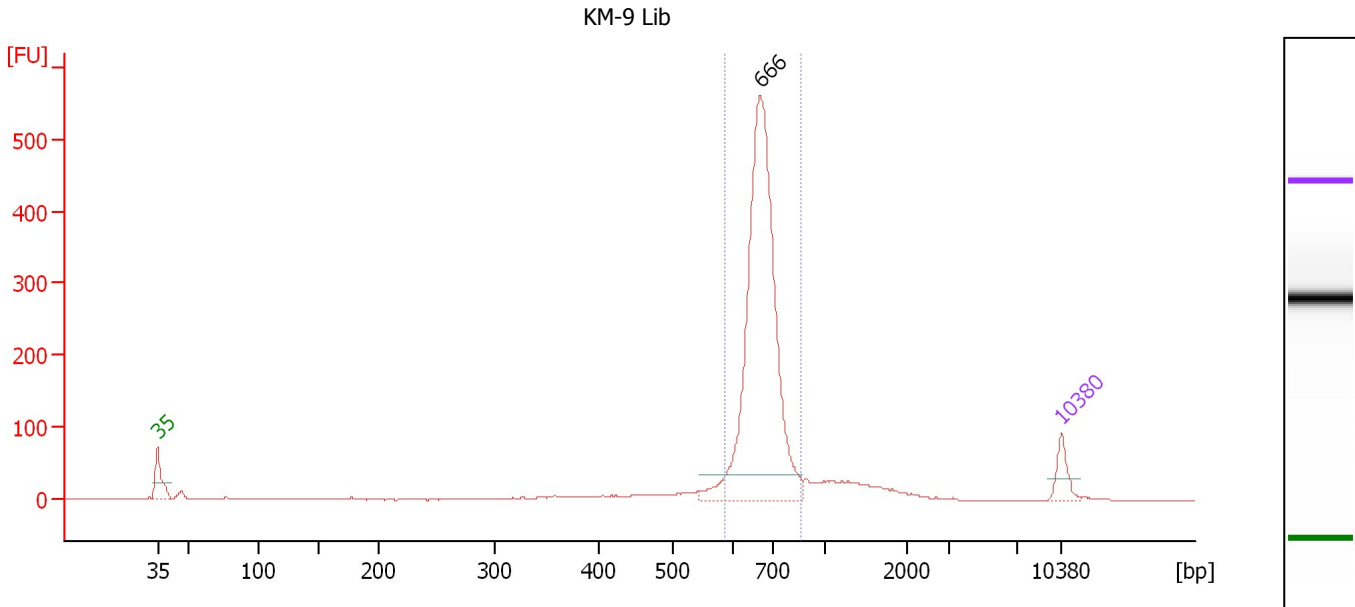
**Region table for sample 3 : KM-8 Lib**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
617	850	699	2,463.4	1,133.22	959.0	88	6.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 4 : KM-9 Lib**

Height Threshold [FU] : 35

**Overall Results for sample 4 : KM-9 Lib**

Number of peaks found: 1                      Corr. Area 1: 1,573.2  
 Noise: 0.2

**Peak table for sample 4 : KM-9 Lib**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	666	2,019.53	4,596.1	
3	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : KM-9 Lib**

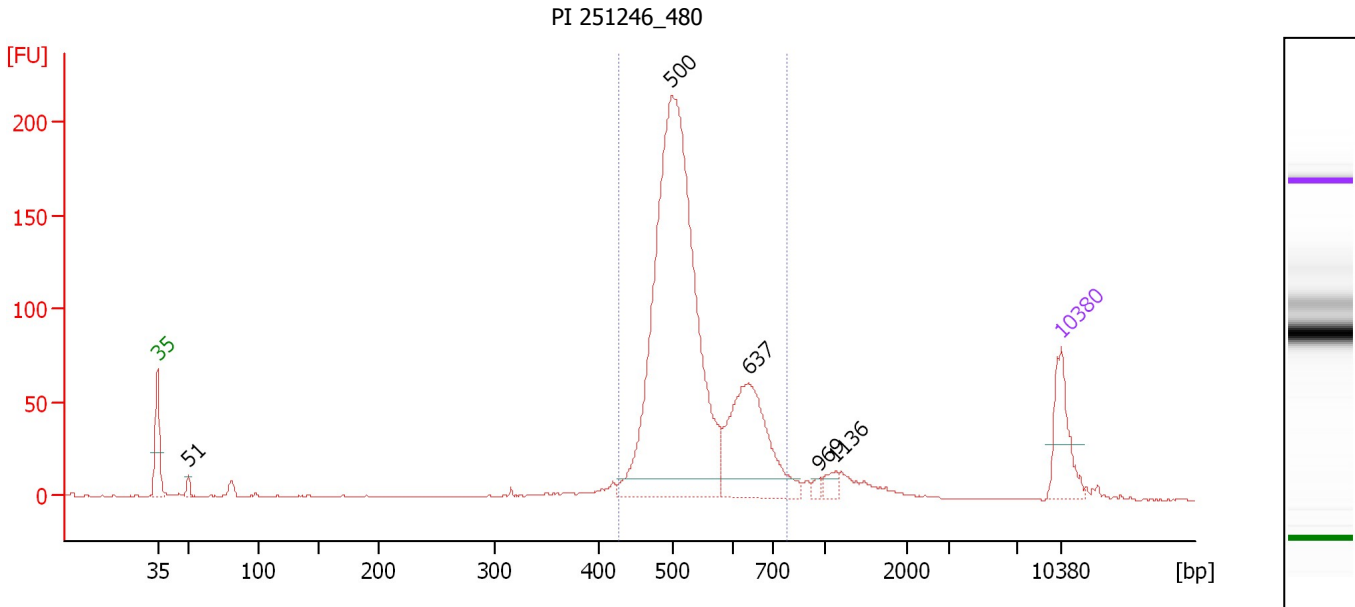
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
585	862	674	4,405.4	1,954.75	1,573.2	80	6.6	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : PI 251246 480**

Height Threshold [FU] : 10

**Overall Results for sample 5 : PI 251246 480**

Number of peaks found: 5                      Corr. Area 1: 1,248.6  
 Noise: 0.3

**Peak table for sample 5 : PI 251246 480**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	11.77	352.2	
3	500	1,110.36	3,368.0	
4	637	266.86	634.9	
5	969	7.67	12.0	
6	1,136	16.62	22.2	
7	10,380	75.00	10.9	Upper Marker

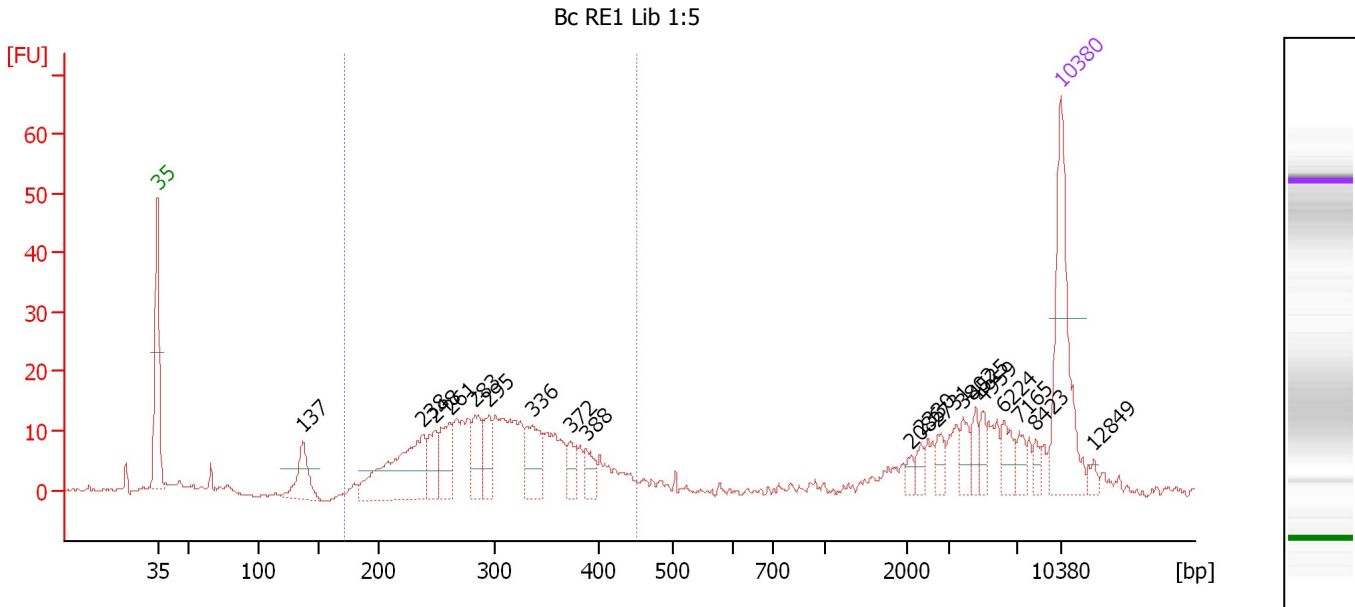
**Region table for sample 5 : PI 251246 480**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
428	777	536	3,900.8	1,355.86	1,248.6	87	12.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Bc RE1 Lib 1:5**

Number of peaks found: 19                      Corr. Area 1: 246.8  
 Noise: 0.3

**Peak table for sample 6 : Bc RE1 Lib 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	137	40.42	445.8	
3	238	108.25	689.1	
4	248	28.36	173.4	
5	261	36.75	213.0	
6	283	32.09	172.0	
7	295	27.55	141.6	
8	336	37.93	171.1	
9	372	14.39	58.5	
10	388	15.67	61.2	
11	2,086	5.02	3.6	
12	2,330	6.71	4.4	
13	2,731	9.28	5.1	
14	3,802	10.76	4.3	
15	4,525	9.52	3.2	
16	4,959	8.89	2.7	
17	6,224	14.68	3.6	
18	7,165	8.47	1.8	
19	8,423	5.49	1.0	
20	10,380	75.00	10.9	Upper Marker
21	12,849	0.00	0.0	

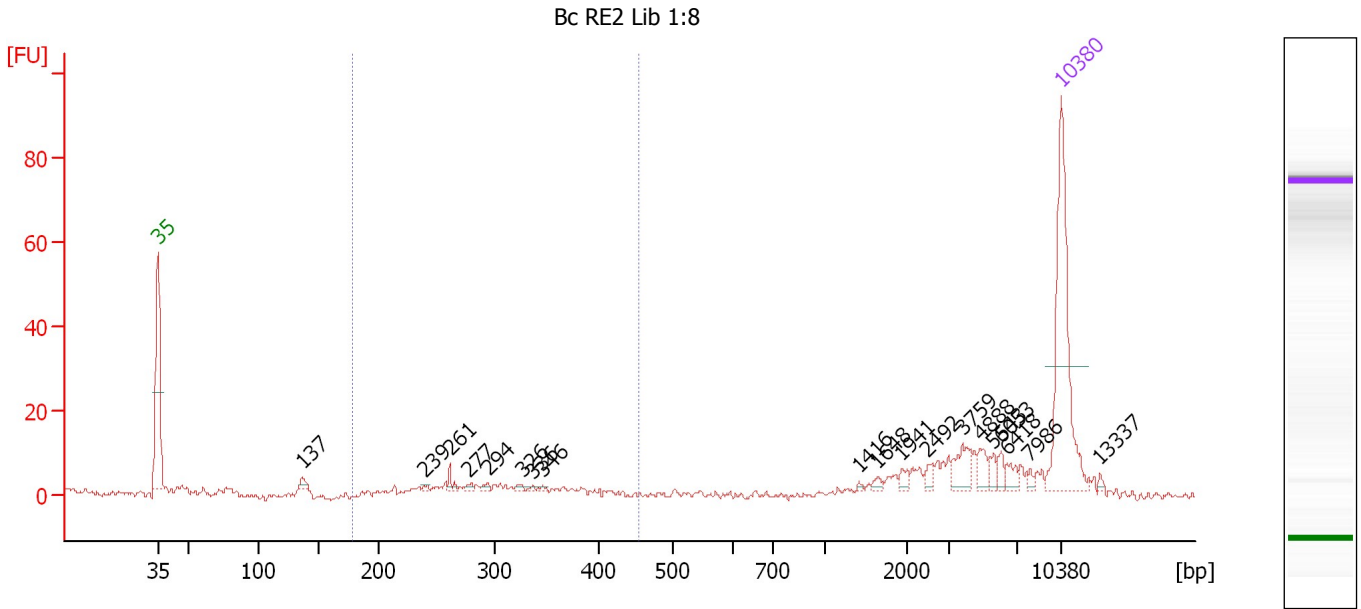
**Region table for sample 6 : Bc RE1 Lib 1:5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
173	452	303	2,260.9	431.54	246.8	64	19.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 7 : Bc RE2 Lib 1:8**

Height Threshold [FU] : 1

**Overall Results for sample 7 : Bc RE2 Lib 1:8**

Number of peaks found: 19                      Corr. Area 1: 6.4  
 Noise: 0.8

**Peak table for sample 7 : Bc RE2 Lib 1:8**


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	137	4.88	53.9	
3	239	1.23	7.8	
4	261	4.39	25.5	
5	277	2.02	11.1	
6	294	1.84	9.5	
7	326	1.55	7.2	
8	336	0.70	3.2	
9	346	0.96	4.2	
10	1,416	0.89	1.0	
11	1,648	2.35	2.2	
12	1,941	3.65	2.8	
13	2,492	3.97	2.4	
14	3,759	12.42	5.0	
15	4,888	7.43	2.3	
16	5,543	4.37	1.2	
17	6,053	4.29	1.1	
18	6,418	4.96	1.2	
19	7,986	2.27	0.4	
20	10,380	75.00	10.9	Upper Marker
21	13,337	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
Modified: 11/16/2012 5:02:01 PM

**Electropherogram Summary Continued ...**

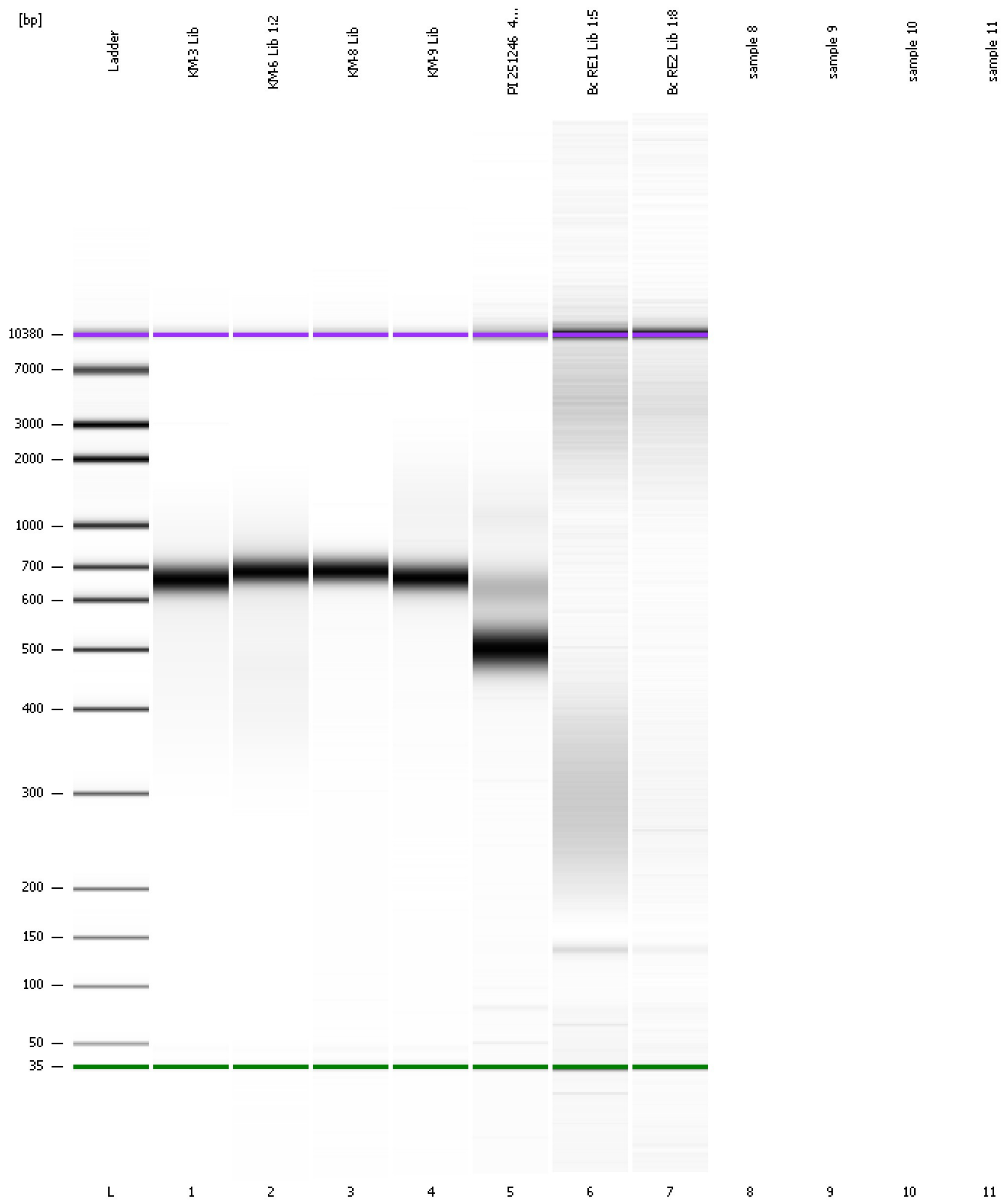
... Region table for sample 7 : Bc RE2 Lib 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
179	455	282	49.0	9.00	6.4	8	10.8	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
Modified: 11/16/2012 5:02:01 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
Modified: 11/16/2012 5:02:01 PM

**Invalid Samples**

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\2012-11-16\2012-11-16\_004.xad

Created: 11/16/2012 4:27:51 PM  
 Modified: 11/16/2012 5:02:01 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 8)		Instrument	Run		11/16/2012 4:57:43 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-11-16\2012-11-16_004.xad)		Instrument	Run		11/16/2012 4:27:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/16/2012 4:27:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/16/2012 4:27:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/16/2012 4:27:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/16/2012 4:27:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/16/2012 4:27:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/16/2012 4:27:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1