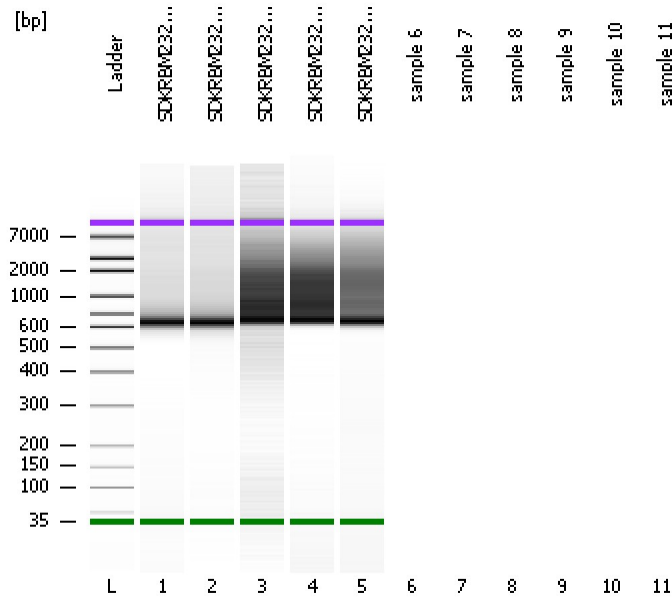


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
Modified: 11/5/2015 10:54:53 AM

### Electrophoresis File Run Summary



#### Instrument Information:

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

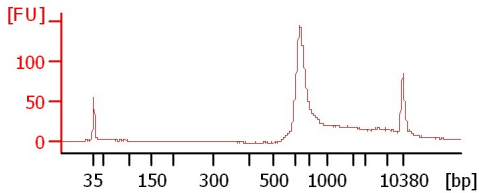
#### Assay Information:

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

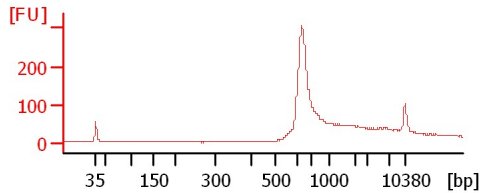
#### Chip Information:

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

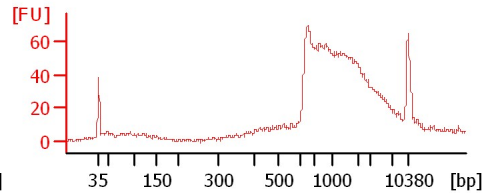
SDKRBM232 25:1 dilution



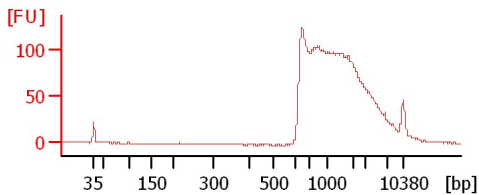
SDKRBM232 50:1 dilution



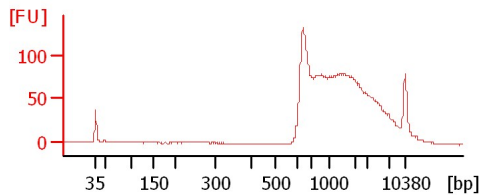
SDKRBM232 Pippin 2 2:1



SDKRBM232 Pippin 2



SDKRBM232 Pippin 1 2:1



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
SDKRBM232 25:1 dilution		<input type="checkbox"/>	✓			
SDKRBM232 50:1 dilution		<input type="checkbox"/>	✓			
SDKRBM232 Pippin 2 2:1		<input type="checkbox"/>	✓			
SDKRBM232 Pippin 2		<input type="checkbox"/>	✓			
SDKRBM232 Pippin 1 2:1		<input type="checkbox"/>	✓			
sample 6		<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\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
Modified: 11/5/2015 10:54:53 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

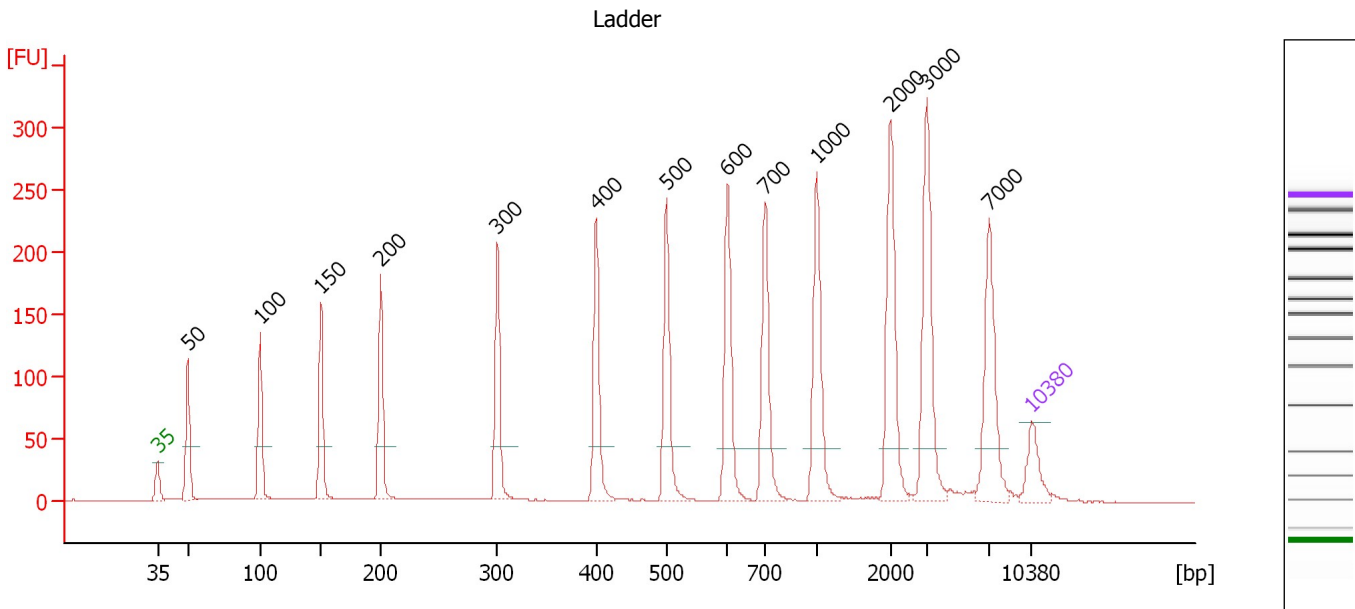
**Ladder**

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\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

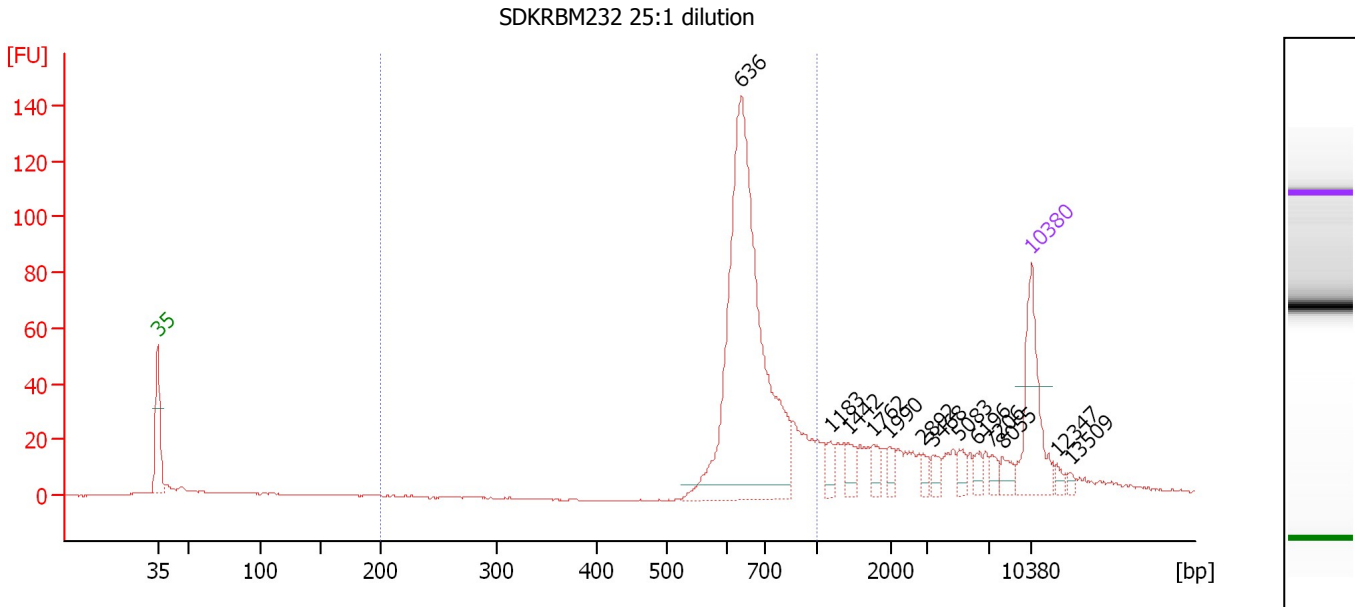
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.41
3	100	150.00	2,272.7	Ladder Peak	51.22
4	150	150.00	1,515.2	Ladder Peak	56.10
5	200	150.00	1,136.4	Ladder Peak	60.88
6	300	150.00	757.6	Ladder Peak	70.22
7	400	150.00	568.2	Ladder Peak	78.13
8	500	150.00	454.5	Ladder Peak	83.77
9	600	150.00	378.8	Ladder Peak	88.64
10	700	150.00	324.7	Ladder Peak	91.68
11	1,000	150.00	227.3	Ladder Peak	95.79
12	2,000	150.00	113.6	Ladder Peak	101.69
13	3,000	150.00	75.8	Ladder Peak	104.60
14	7,000	150.00	32.5	Ladder Peak	109.60
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : SDKRBM232 25:1 dilution**

Number of peaks found: 13                      Corr. Area 1: 520.2  
 Noise: 0.2

**Peak table for sample 1 : SDKRBM232 25:1 dilution**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	636	516.35	1,230.5		89.73
3	1,183	14.65	18.8		96.87
4	1,442	15.79	16.6		98.40
5	1,762	13.67	11.8		100.28
6	1,990	10.00	7.6		101.63
7	2,892	7.57	4.0		104.28
8	3,468	9.95	4.3		105.18
9	5,083	10.98	3.3		107.20
10	6,196	9.09	2.2		108.60
11	7,206	8.86	1.9		109.81
12	8,055	11.14	2.1		110.66
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,347	0.00	0.0		114.98
15	13,509	0.00	0.0		116.15

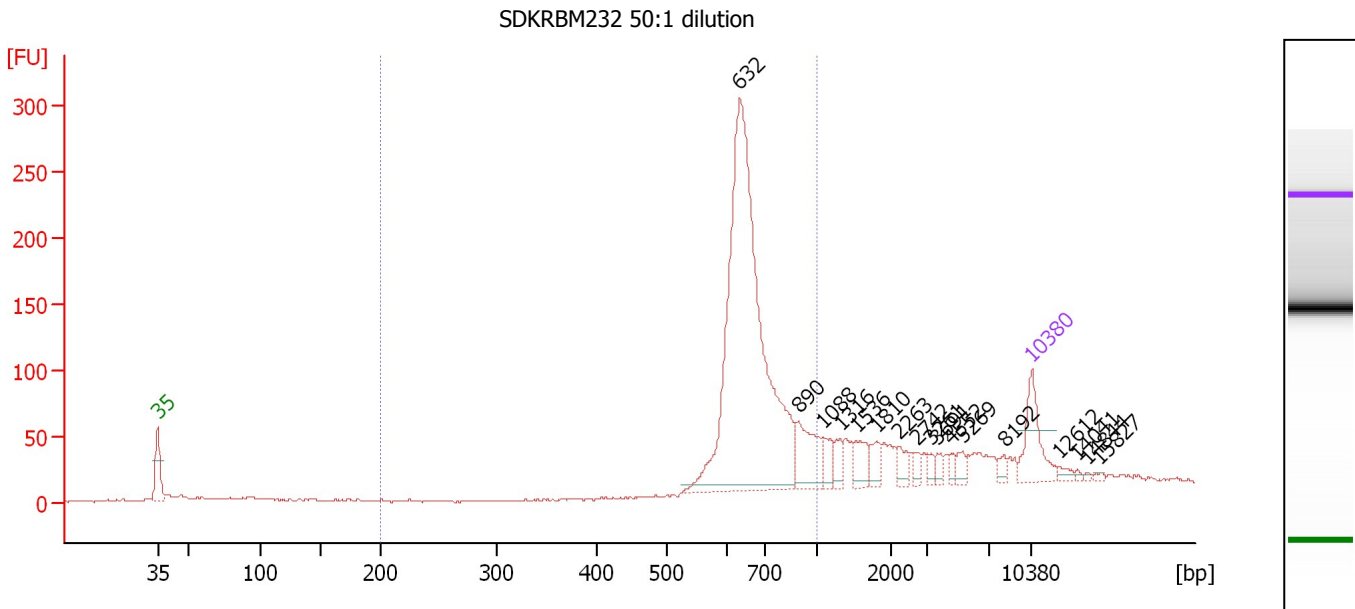
**Region table for sample 1 : SDKRBM232 25:1 dilution**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	684	520.2	1,211.8	537.83	64	14.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : SDKRBM232 50:1 dilution**

Number of peaks found: 17                      Corr. Area 1: 1,086.0  
 Noise: 0.5

**Peak table for sample 2 : SDKRBM232 50:1 dilution**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	632	1,017.83	2,438.8		89.62
3	890	97.94	166.7		94.29
4	1,088	29.91	41.7		96.31
5	1,316	23.45	27.0		97.65
6	1,536	38.58	38.1		98.96
7	1,810	26.87	22.5		100.57
8	2,263	21.42	14.3		102.46
9	2,742	11.33	6.3		103.85
10	3,261	10.53	4.9		104.92
11	3,691	12.83	5.3		105.46
12	4,552	10.41	3.5		106.54
13	5,269	14.45	4.2		107.44
14	8,192	11.48	2.1		110.80
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,612	0.00	0.0		115.24
17	14,041	0.00	0.0		116.68
18	14,844	0.00	0.0		117.49
19	15,827	0.00	0.0		118.47

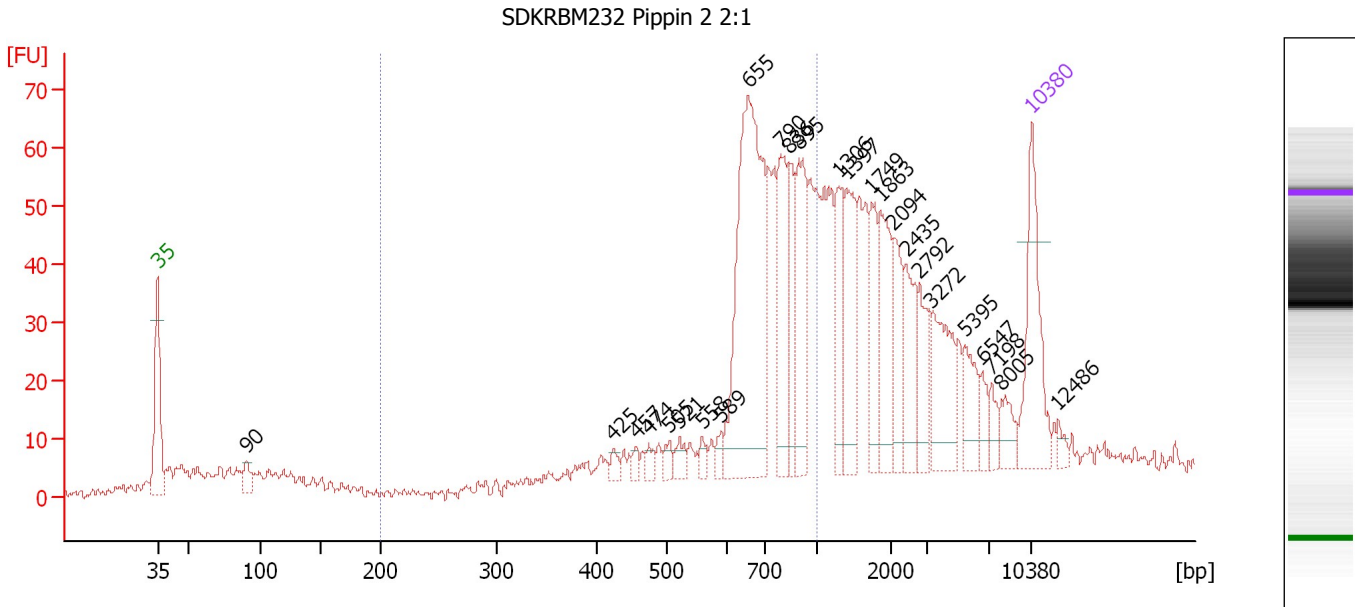
**Region table for sample 2 : SDKRBM232 50:1 dilution**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	683	1,086.0	2,415.7	1,070.20	68	14.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : SDKRBM232 Pippin 2 2:1**

Number of peaks found: 25                      Corr. Area 1: 473.9  
 Noise: 0.9

**Peak table for sample 3 : SDKRBM232 Pippin 2 2:1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	90	15.98	267.6		50.12
3	425	8.59	30.6		79.53
4	457	6.76	22.4		81.33
5	474	8.46	27.0		82.32
6	505	9.18	27.5		83.99
7	521	12.46	36.2		84.80
8	558	8.26	22.4		86.60
9	589	8.00	20.6		88.09
10	655	280.56	649.4		90.30
11	790	82.59	158.4		92.91
12	836	51.13	92.7		93.54
13	895	82.94	140.4		94.35
14	1,306	49.73	57.7		97.59
15	1,397	66.31	71.9		98.14
16	1,749	42.68	37.0		100.21
17	1,863	64.37	52.3		100.88
18	2,094	38.67	28.0		101.96
19	2,435	42.94	26.7		102.95
20	2,792	35.36	19.2		103.99
21	3,272	62.61	29.0		104.94
22	5,395	30.00	8.4		107.59
23	6,547	13.94	3.2		109.04
24	7,198	11.50	2.4		109.80
25	8,005	18.07	3.4		110.61

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 3 : SDKRBM232 Pippin 2 2:1

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	10,380	75.00	10.9	Upper Marker	113.00
27	12,486	0.00	0.0		115.12

#### Region table for sample 3 : SDKRBM232 Pippin 2 2:1

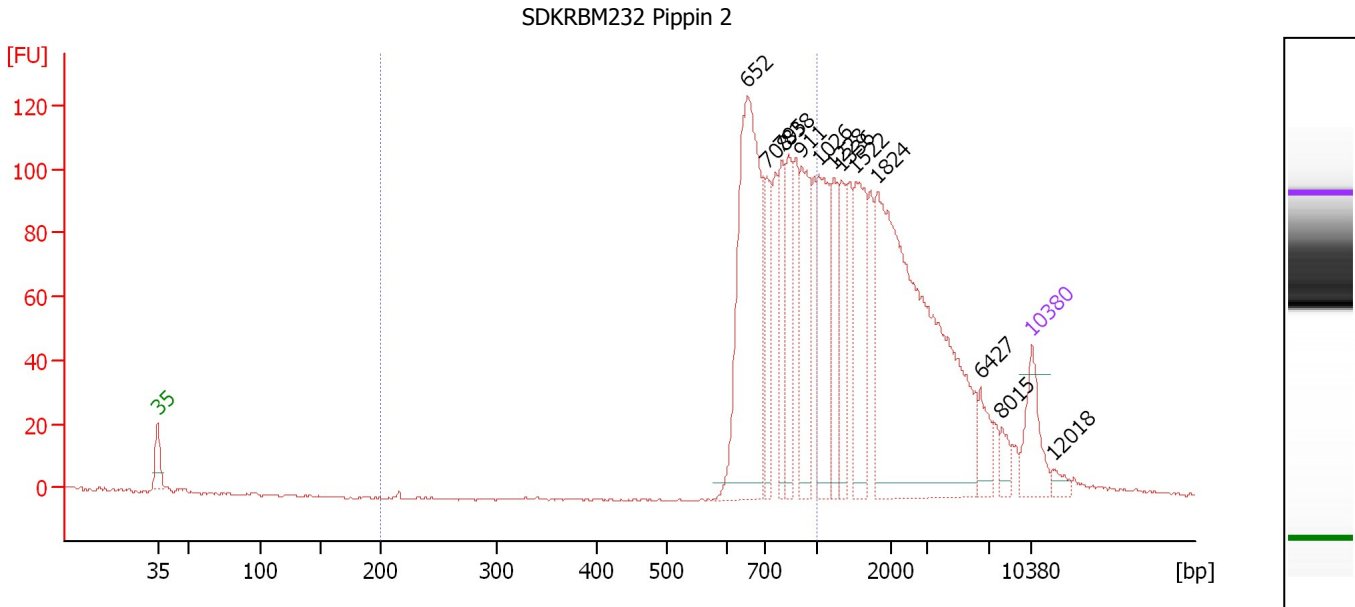
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% of Total	Size distribution in CV [%]
200	1,000	730	473.9	1,617.6	733.51	43	20.1



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : SDKRBM232 Pippin 2**

Number of peaks found: 13                      Corr. Area 1: 764.4  
 Noise: 0.4

**Peak table for sample 4 : SDKRBM232 Pippin 2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	652	537.19	1,247.6		90.23
3	708	120.48	257.9		91.79
4	795	119.05	227.0		92.97
5	838	118.20	213.7		93.57
6	911	167.53	278.5		94.57
7	1,026	185.75	274.2		95.95
8	1,228	96.23	118.8		97.13
9	1,336	93.93	106.5		97.77
10	1,522	179.38	178.5		98.87
11	1,824	756.87	628.6		100.66
12	6,427	45.39	10.7		108.89
13	8,015	23.19	4.4		110.62
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,018	0.00	0.0		114.65

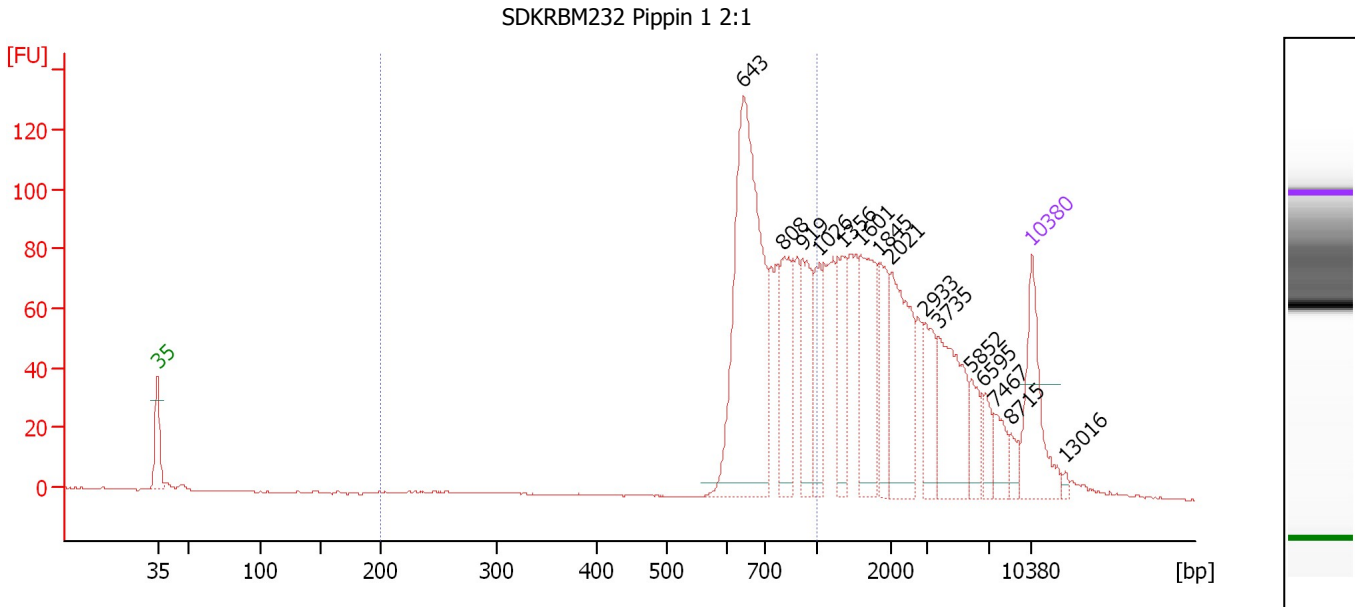
**Region table for sample 4 : SDKRBM232 Pippin 2**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	773	764.4	2,642.1	1,319.98	42	15.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : SDKRBM232 Pippin 1 2:1**

Number of peaks found: 15                      Corr. Area 1: 695.7  
 Noise: 0.2

**Peak table for sample 5 : SDKRBM232 Pippin 1 2:1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	643	367.27	865.4		89.95
3	808	93.57	175.6		93.15
4	919	75.43	124.3		94.69
5	1,026	53.90	79.6		95.94
6	1,356	62.79	70.1		97.89
7	1,601	100.42	95.1		99.33
8	1,845	52.42	43.1		100.78
9	2,021	111.58	83.7		101.75
10	2,933	44.47	23.0		104.40
11	3,735	93.89	38.1		105.52
12	5,852	27.60	7.1		108.17
13	6,595	21.57	5.0		109.10
14	7,467	22.18	4.5		110.07
15	8,715	10.79	1.9		111.33
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,016	0.00	0.0		115.65

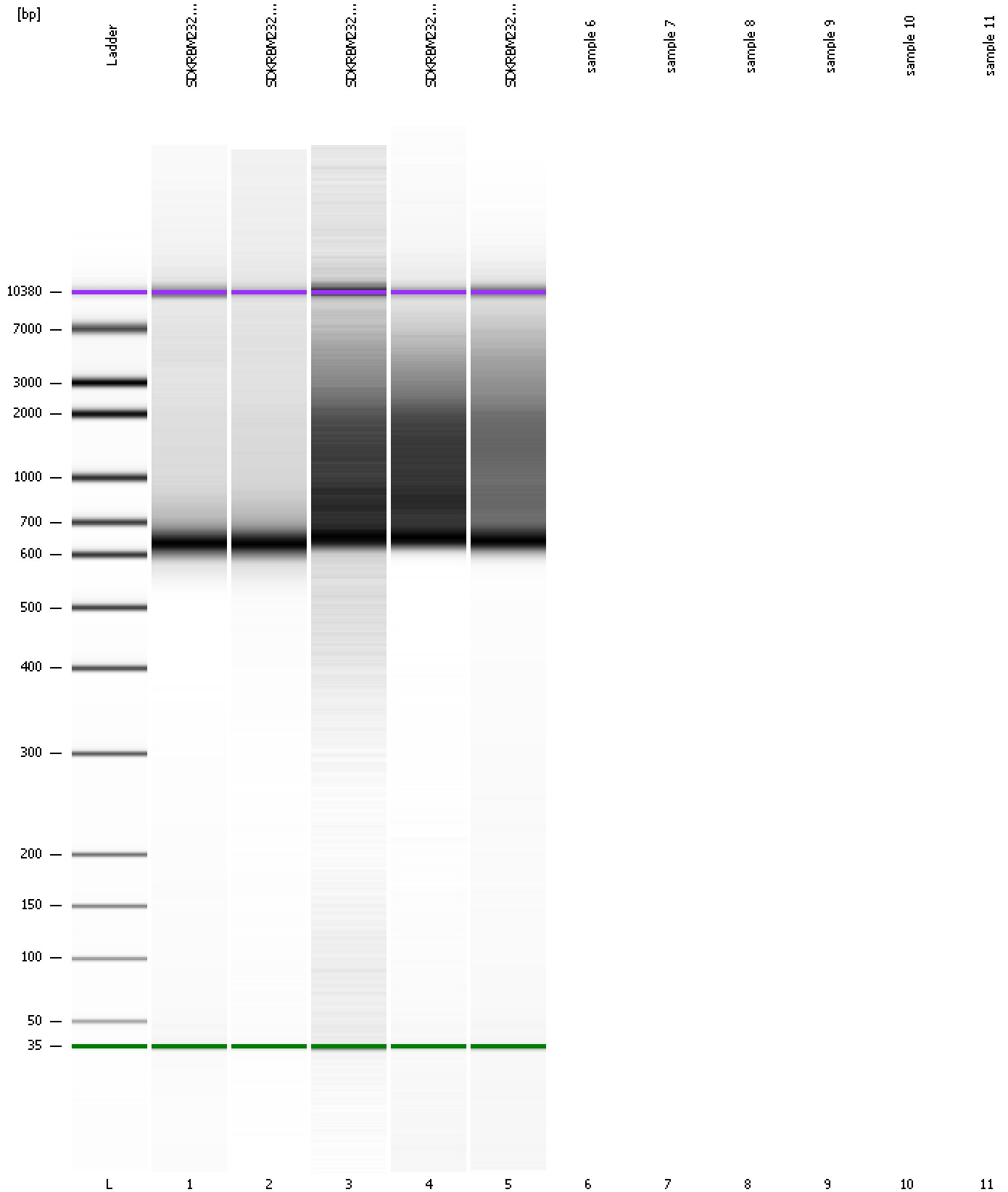
**Region table for sample 5 : SDKRBM232 Pippin 1 2:1**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	751	695.7	1,386.6	671.35	42	15.8

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
Modified: 11/5/2015 10:54:53 AM

**Gel Image**

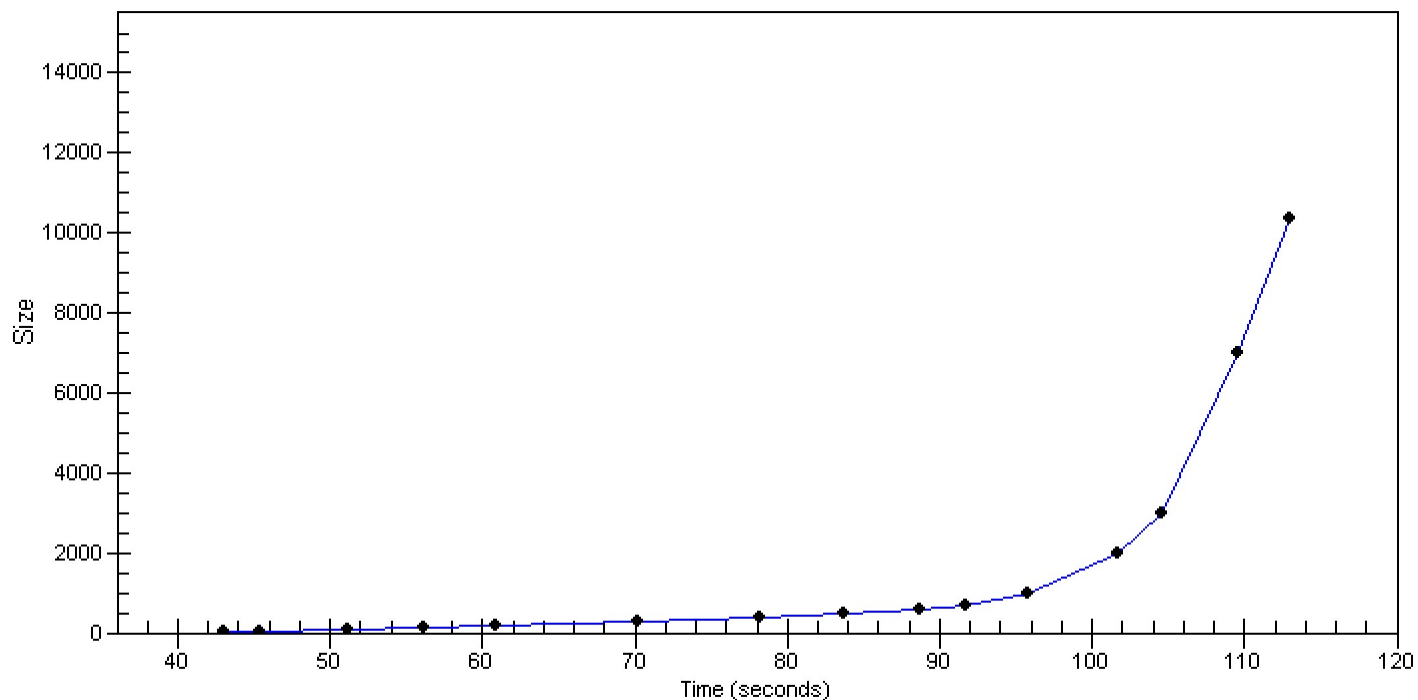


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
Modified: 11/5/2015 10:54:53 AM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
Modified: 11/5/2015 10:54:53 AM

**Invalid Samples**

Sample 6 has not been run, no results available.

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\2015-11-05\2015-11-05\_002.xad

Created: 11/5/2015 10:30:36 AM  
 Modified: 11/5/2015 10:54:53 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		11/5/2015 8:54:47 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-11-05\2015-11-05_002.xad)		Instrument	Run		11/5/2015 8:30:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/5/2015 8:30:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/5/2015 8:30:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/5/2015 8:30:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/5/2015 8:30:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/5/2015 8:30:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/5/2015 8:30:42 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1