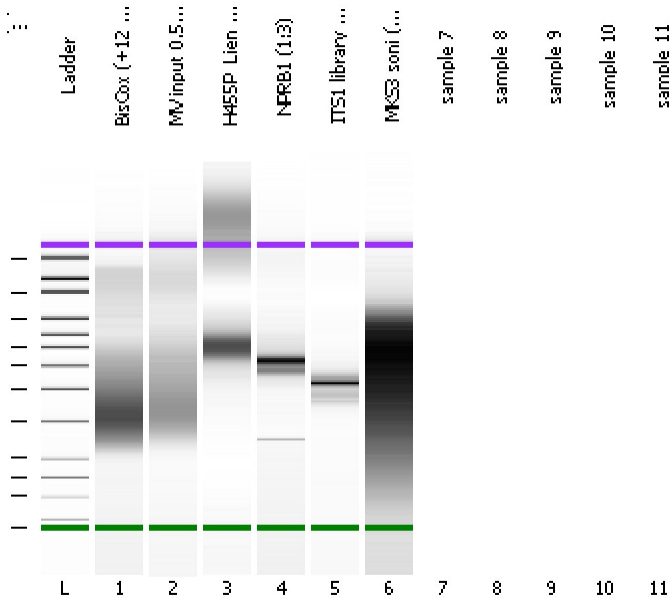


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

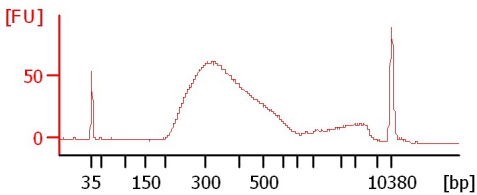
Assay Information:

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

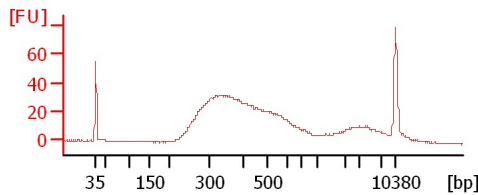
Chip Information:

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

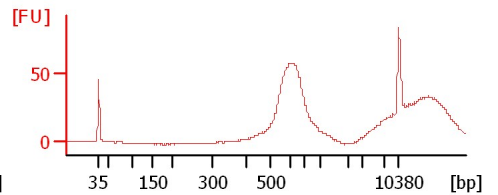
**BisCox (+12 cyc PCR) 0.55XR/0.95XL (1:2)**



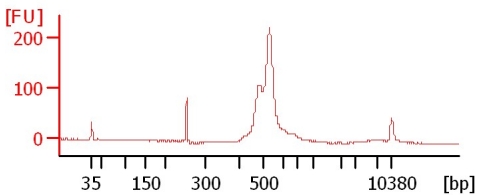
**MV input 0.55x R/0.95XL (1:40)**



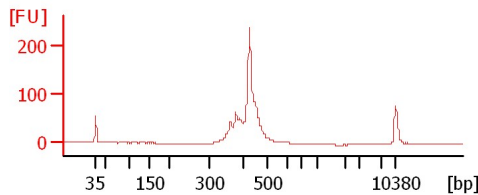
**H455P\_Lien (1:3)**



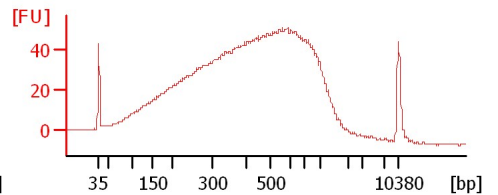
**NPRB1 (1:3)**



**ITS1 library (1:6)**



**MKS3 soni (40sec) (1:5)**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
Modified: 4/12/2016 8:00:38 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
BisCox (+12 cyc PCR)		<input type="checkbox"/>	✓			
0.55XR/0.95XL (1:2)						
MV input 0.55x R/0.95XL (1:40)		<input type="checkbox"/>	✓			
H455P_Lien (1:3)		<input type="checkbox"/>	✓			
NPRB1 (1:3)		<input type="checkbox"/>	✓			
ITS1 library (1:6)		<input type="checkbox"/>	✓			
MKS3 soni (40sec) (1:5)		<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:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
Modified: 4/12/2016 8:00:38 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

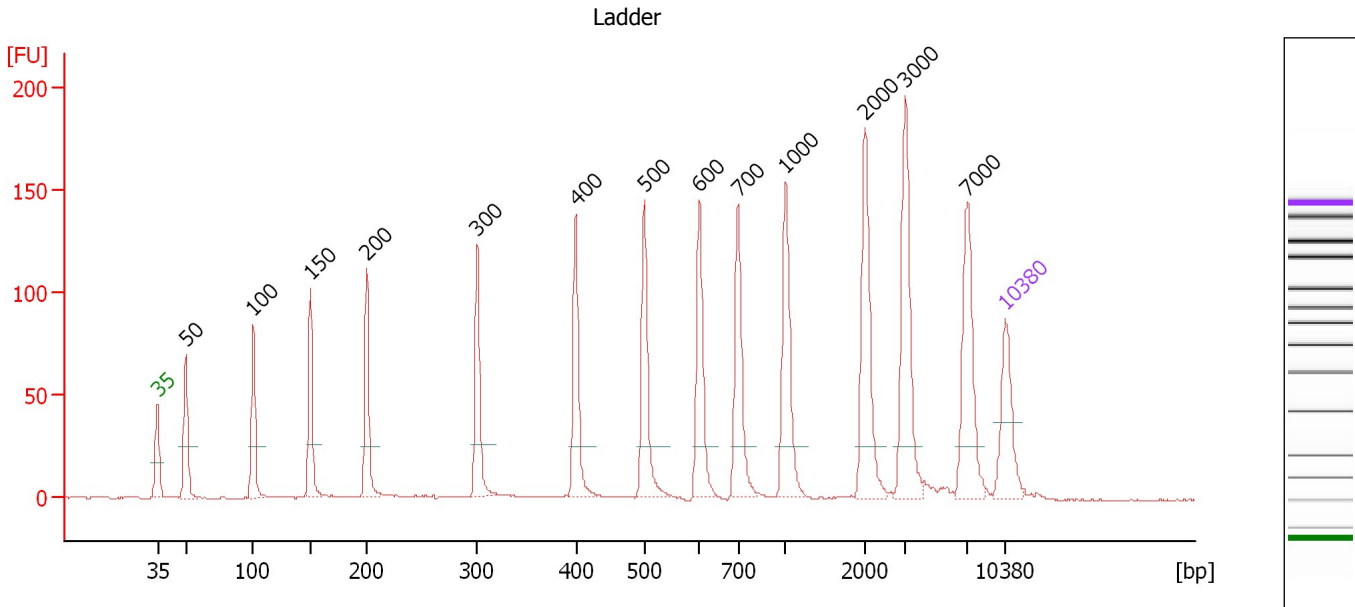
**Ladder**

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:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

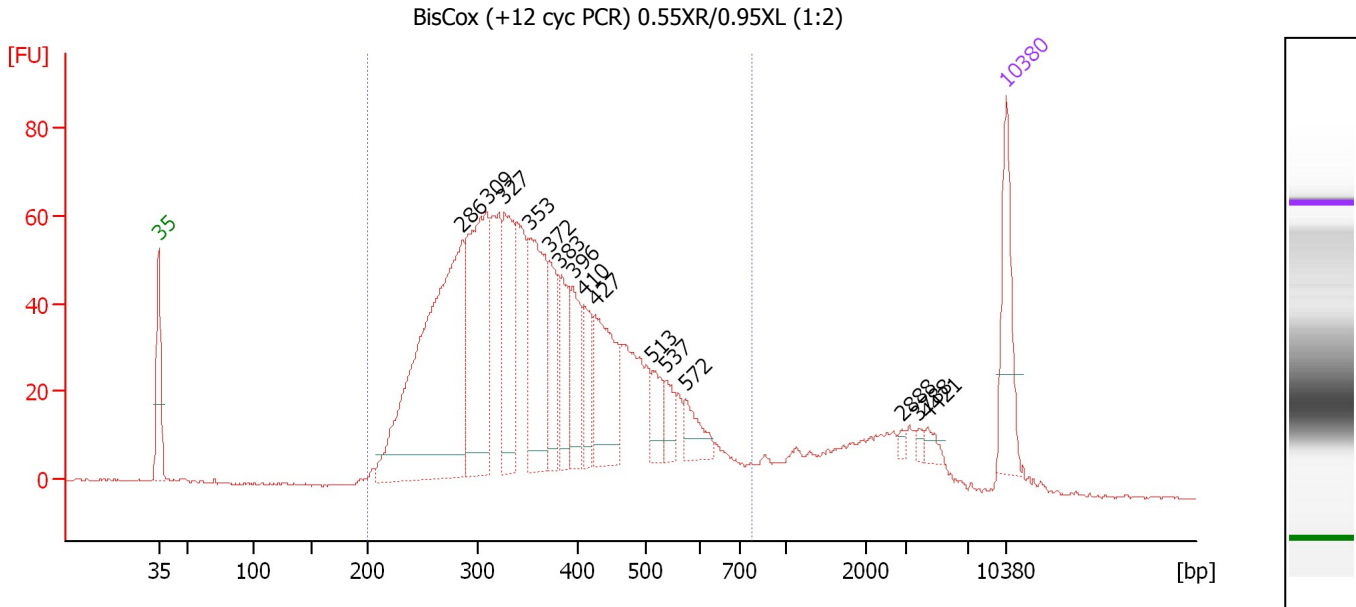
**Peak table for Ladder**

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	45.32
3	100	150.00	2,272.7	Ladder Peak	50.90
4	150	150.00	1,515.2	Ladder Peak	55.63
5	200	150.00	1,136.4	Ladder Peak	60.26
6	300	150.00	757.6	Ladder Peak	69.39
7	400	150.00	568.2	Ladder Peak	77.53
8	500	150.00	454.5	Ladder Peak	83.20
9	600	150.00	378.8	Ladder Peak	87.74
10	700	150.00	324.7	Ladder Peak	90.91
11	1,000	150.00	227.3	Ladder Peak	94.84
12	2,000	150.00	113.6	Ladder Peak	101.41
13	3,000	150.00	75.8	Ladder Peak	104.72
14	7,000	150.00	32.5	Ladder Peak	109.83
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : BisCox (+12 cyc PCR) 0.55XR/0.95XL (1:2)**

Number of peaks found: 15                      Corr. Area 1: 1,518.5  
 Noise: 0.3

**Peak table for sample 1 : BisCox (+12 cyc PCR) 0.55XR/0.95XL (1:2)**

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	286	573.86	3,042.8		68.09
3	309	290.51	1,426.5		70.09
4	327	141.68	657.2		71.56
5	353	180.50	774.9		73.70
6	372	82.70	336.6		75.27
7	383	78.88	312.2		76.12
8	396	77.74	297.3		77.22
9	410	56.63	209.1		78.12
10	427	124.81	442.7		79.07
11	513	38.83	114.8		83.77
12	537	26.70	75.4		84.87
13	572	36.37	96.3		86.48
14	2,888	4.42	2.3		104.35
15	3,788	5.09	2.0		105.73
16	4,421	9.73	3.3		106.54
17	10,380	75.00	10.9	Upper Marker	113.00

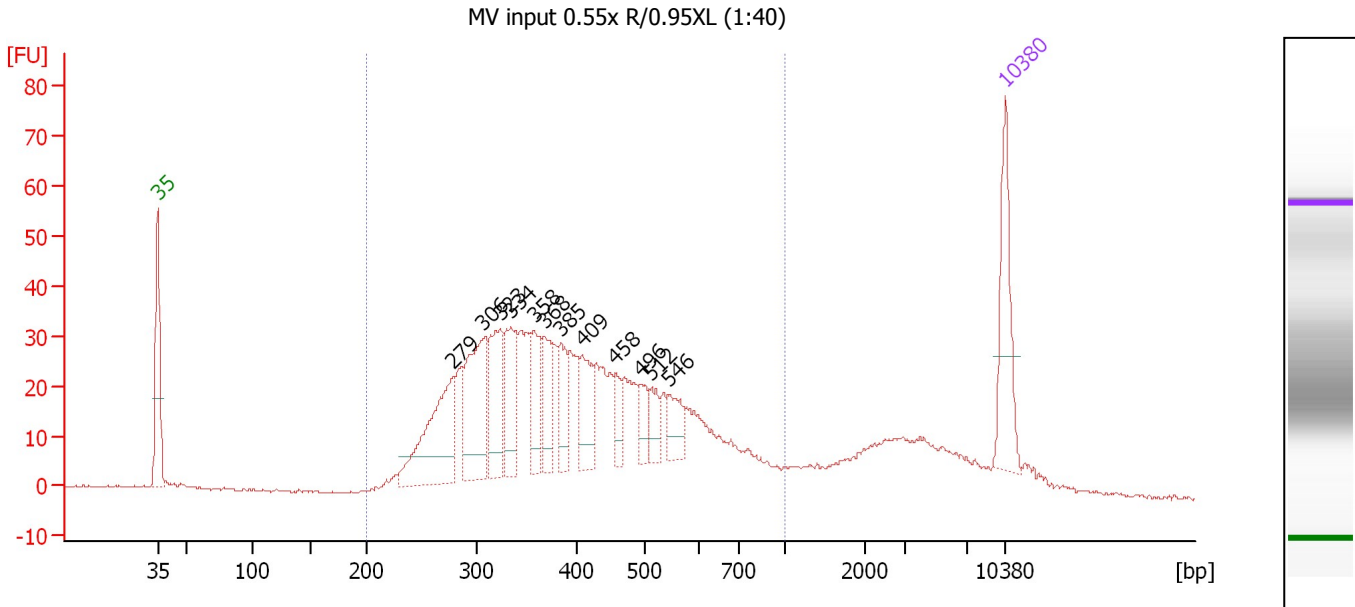
**Region table for sample 1 : BisCox (+12 cyc PCR) 0.55XR/0.95XL (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	780	373	1,518.5	10,939.8	2,438.49	88	27.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : MV input 0.55x R/0.95XL (1:40)**

Number of peaks found: 12                      Corr. Area 1: 853.4  
 Noise: 0.2

**Peak table for sample 2 : MV input 0.55x R/0.95XL (1:40)**

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	279	163.40	888.6		67.44
3	306	148.56	736.1		69.86
4	323	95.88	449.4		71.28
5	334	76.47	347.1		72.14
6	358	59.16	250.6		74.08
7	368	54.84	226.0		74.89
8	385	43.80	172.6		76.27
9	409	57.52	213.2		78.02
10	458	25.61	84.7		80.82
11	496	26.16	79.9		82.96
12	512	26.14	77.3		83.77
13	546	34.44	95.6		85.28
14	10,380	75.00	10.9	Upper Marker	113.00

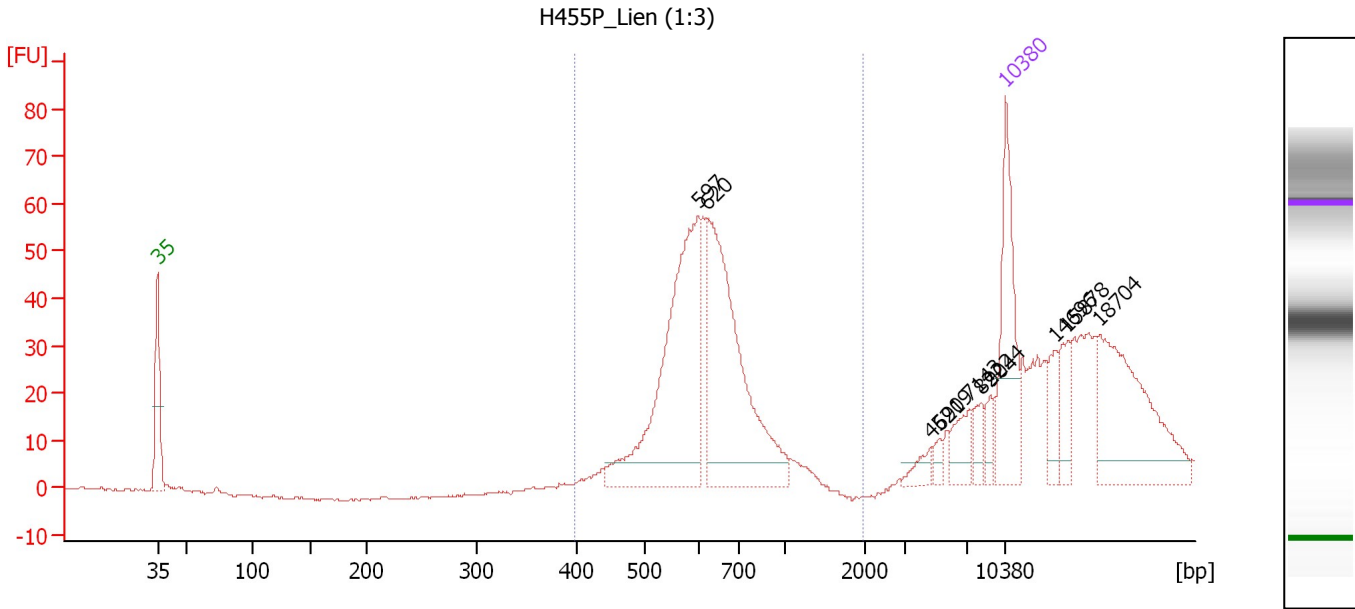
**Region table for sample 2 : MV input 0.55x R/0.95XL (1:40)**

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	420	853.4	6,265.2	1,530.75	84	32.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : H455P\_Lien (1:3)**

Number of peaks found: 10                      Corr. Area 1: 477.7  
 Noise: 0.3

**Peak table for sample 3 : H455P\_Lien (1:3)**

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	597	247.31	627.6		87.61
3	620	233.70	571.0		88.38
4	4,690	10.51	3.4		106.88
5	5,219	6.61	1.9		107.56
6	7,143	21.77	4.6		109.96
7	8,222	12.86	2.4		110.98
8	9,044	10.64	1.8		111.75
9	10,380	75.00	10.9	Upper Marker	113.00
10	14,696	0.00	0.0		117.05
11	15,878	0.00	0.0		118.15
12	18,704	0.00	0.0		120.80

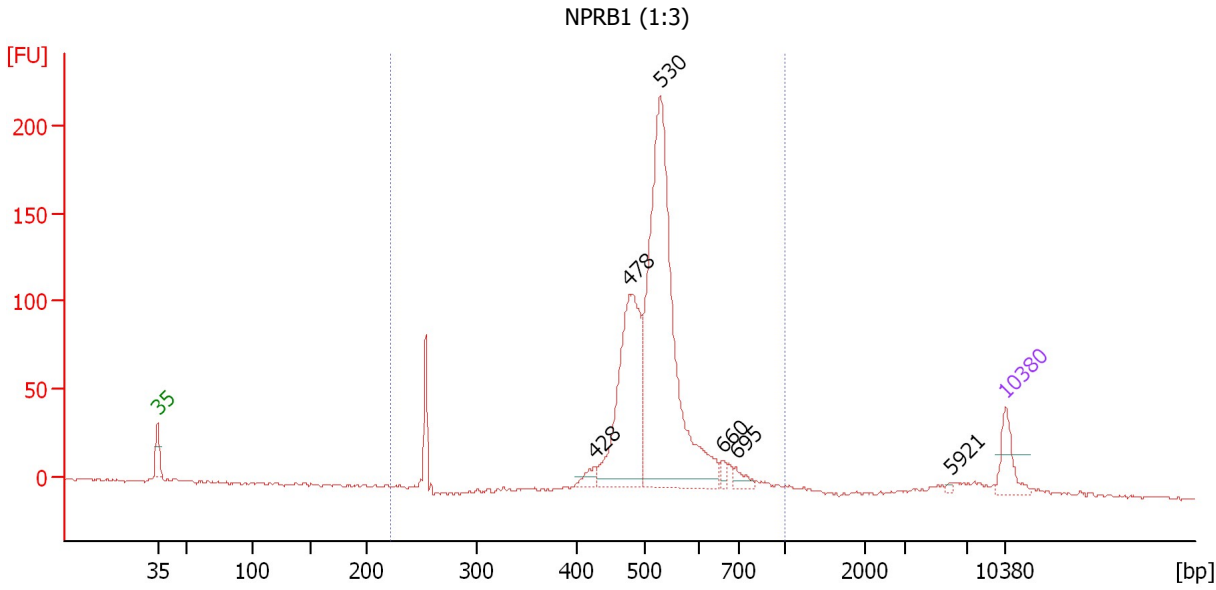
**Region table for sample 3 : H455P\_Lien (1:3)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
399	1,965	640	477.7	1,362.9	551.79	56	21.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : NPRB1 (1:3)**

Number of peaks found: 6                      Corr. Area 1: 1,035.1  
 Noise: 0.8

**Peak table for sample 4 : NPRB1 (1:3)**

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	428	30.49	107.8		79.14
3	478	618.90	1,962.6		81.94
4	530	1,306.61	3,736.8		84.55
5	660	21.23	48.8		89.63
6	695	32.16	70.1		90.75
7	5,921	5.07	1.3		108.45
8	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : NPRB1 (1:3)**

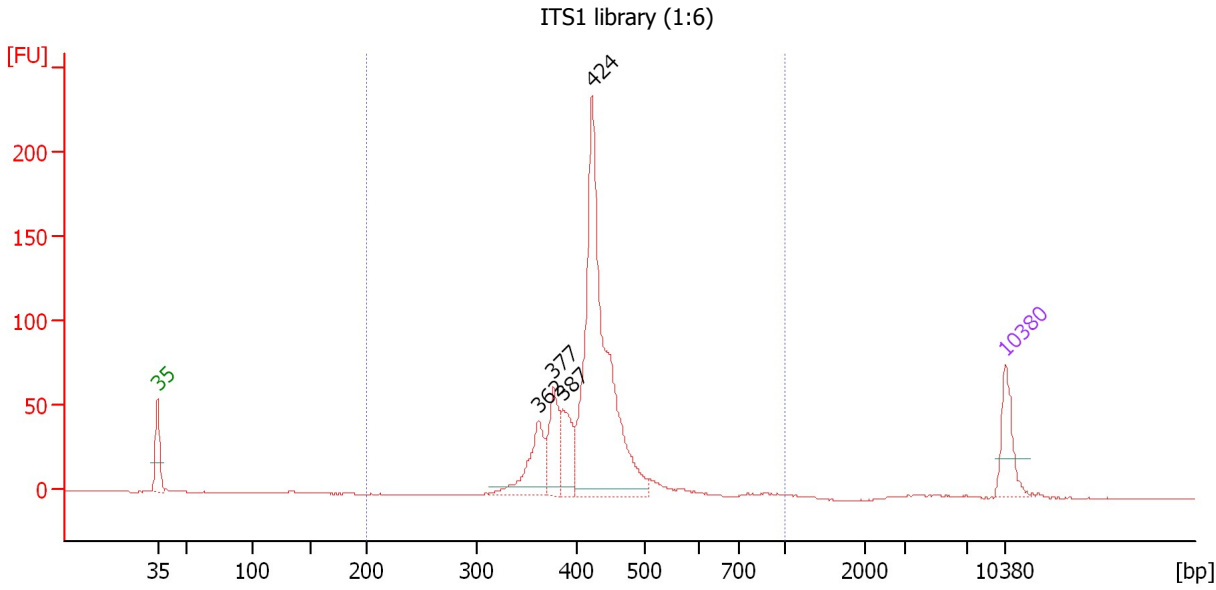
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
221	1,000	522	1,035.1	6,562.2	2,164.24	94	15.6



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : ITS1 library (1:6)**

Number of peaks found: 4                      Corr. Area 1: 811.5  
 Noise: 0.3

**Peak table for sample 5 : ITS1 library (1:6)**

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	362	143.50	599.9		74.47
3	377	123.77	496.8		75.70
4	387	98.90	387.1		76.48
5	424	818.03	2,924.0		78.88
6	10,380	75.00	10.9	Upper Marker	113.00

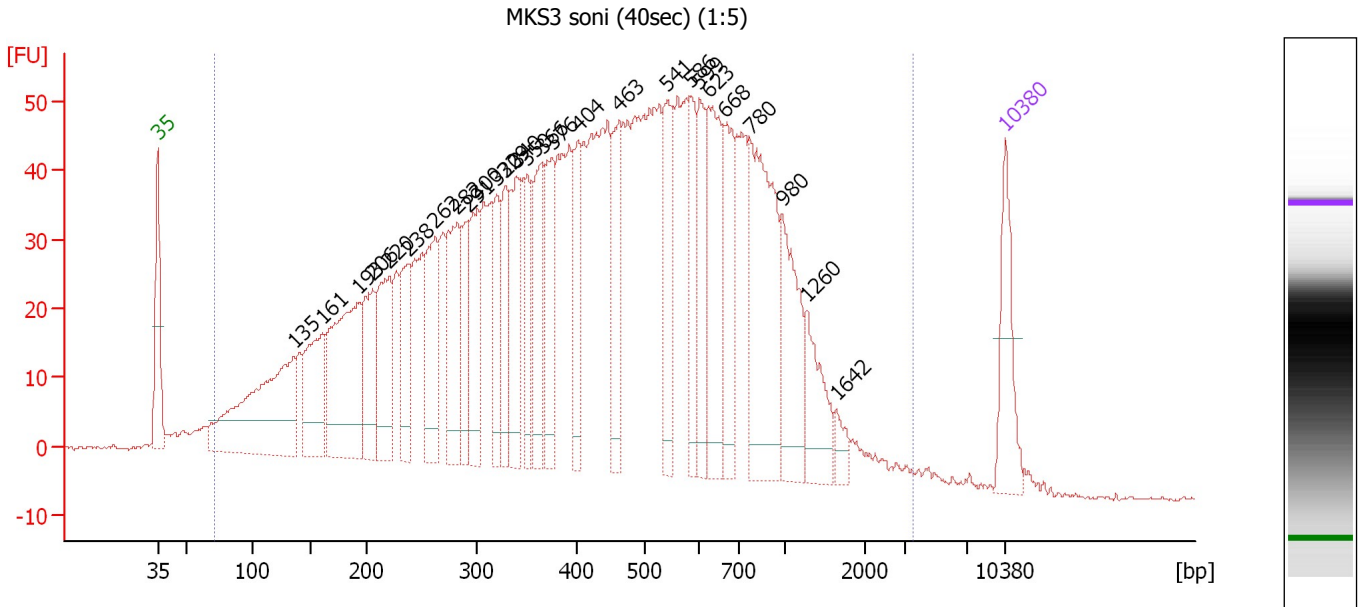
**Region table for sample 5 : ITS1 library (1:6)**

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	423	811.5	4,307.9	1,187.33	99	12.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : MKS3 soni (40sec) (1:5)**

Number of peaks found: 27                      Corr. Area 1: 2,340.9  
 Noise: 0.3

**Peak table for sample 6 : MKS3 soni (40sec) (1:5)**

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	135	356.99	3,999.7		54.23
3	161	163.73	1,541.1		56.65
4	193	276.28	2,164.6		59.65
5	206	120.19	885.3		60.78
6	220	146.63	1,008.6		62.11
7	238	102.53	654.0		63.69
8	262	138.12	799.3		65.91
9	282	147.93	795.4		67.73
10	291	80.36	417.7		68.62
11	300	113.21	571.5		69.40
12	320	83.19	394.5		70.98
13	329	90.07	415.3		71.72
14	340	116.20	517.7		72.66
15	350	83.57	361.4		73.49
16	366	115.07	476.2		74.77
17	376	109.59	441.8		75.56
18	404	83.83	314.7		77.73
19	463	104.58	341.9		81.13
20	541	102.88	288.1		85.07
21	586	85.47	221.2		87.09
22	599	88.96	225.2		87.68
23	623	167.78	408.1		88.47
24	668	100.65	228.3		89.90
25	780	240.55	467.0		91.97

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 6 : MKS3 soni (40sec) (1:5)

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	980	123.64	191.1		94.58
27	1,260	75.04	90.2		96.55
28	1,642	18.86	17.4		99.06
29	10,380	75.00	10.9	Upper Marker	113.00

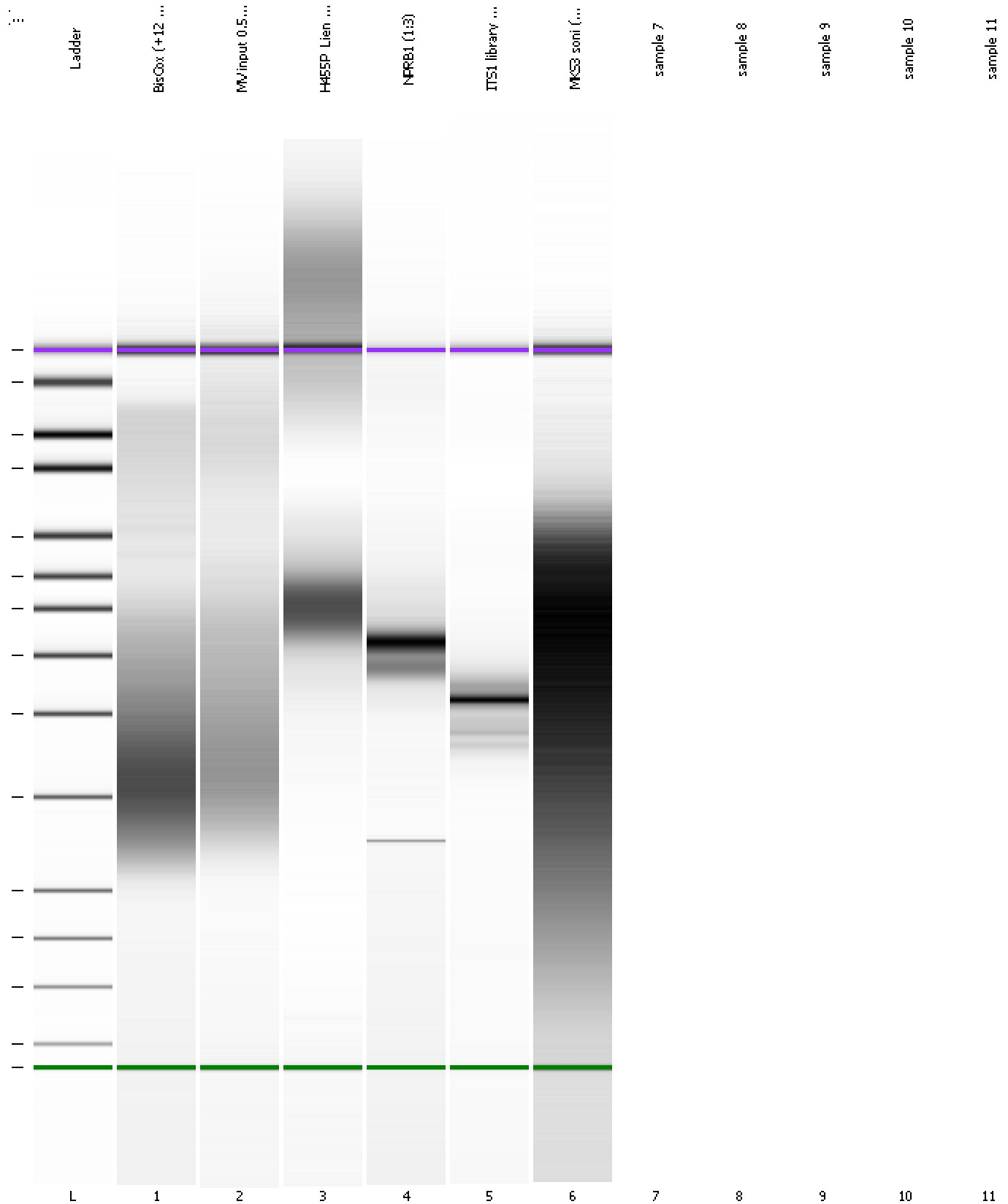
#### Region table for sample 6 : MKS3 soni (40sec) (1:5)

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% of Total	Size distribution in CV [%]
72	3,560	506	2,340.9	27,487.2	5,362.23	98	66.5

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
Modified: 4/12/2016 8:00:38 PM

**Gel Image**

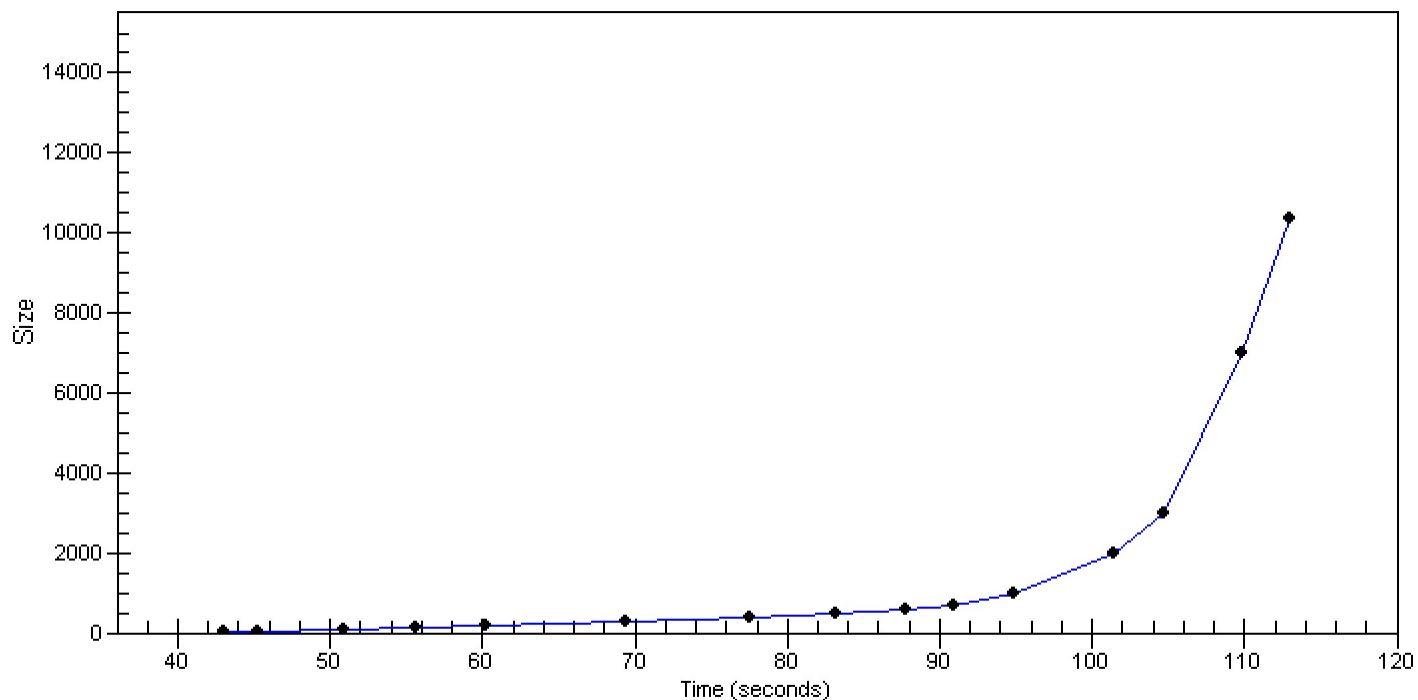


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
Modified: 4/12/2016 8:00:38 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
Modified: 4/12/2016 8:00:38 PM

**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:\... bioanalyzer\2100 expert\data\2016-04-12\2016-04-12\_007.xad

Created: 4/12/2016 7:29:43 PM  
 Modified: 4/12/2016 8:00:38 PM

**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		4/12/2016 7:56:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-04-12\2016-04-12_007.xad)		Instrument	Run		4/12/2016 7:29:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/12/2016 7:29:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/12/2016 7:29:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/12/2016 7:29:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/12/2016 7:29:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/12/2016 7:29:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/12/2016 7:29:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1