

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
Modified: 1/9/2013 2:49:33 PM

Electrophoresis File Run Summary

Instrument Information:

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

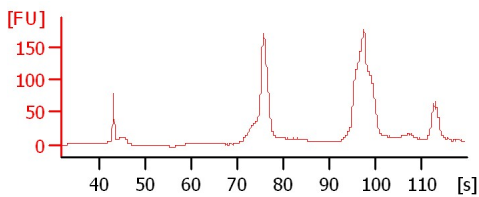
Assay Information:

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

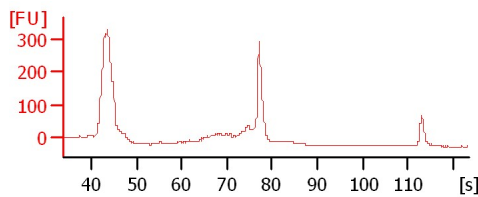
Chip Information:

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

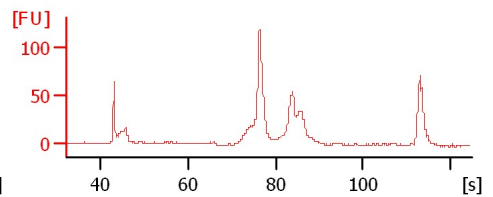
Magenta Box #1: Dong



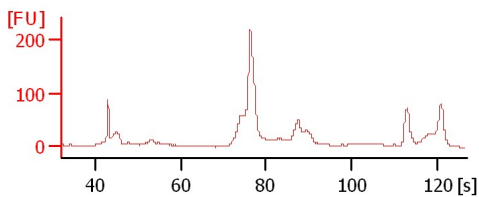
MB #1: Kit



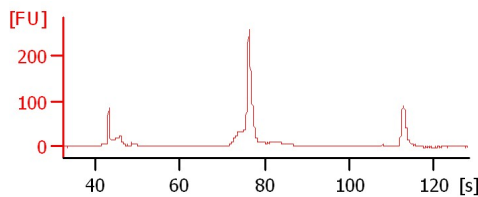
MB #1: Nip



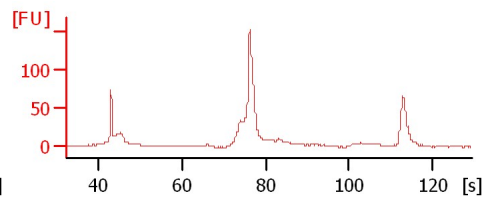
MB#2: IR50



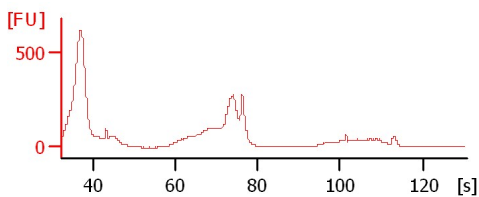
MB #2: M104



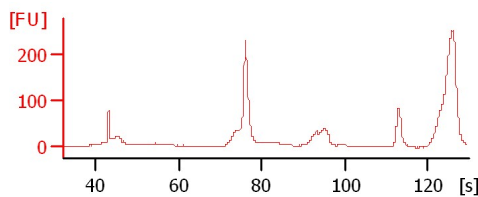
MB #2: Nip



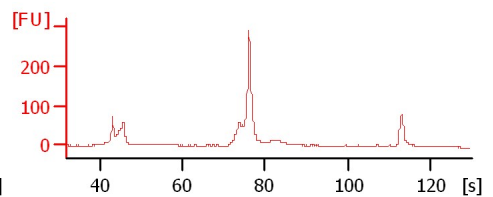
MB #3: Dong



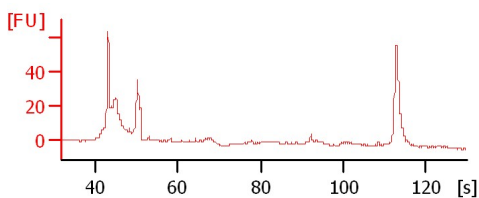
MB #3: Kit



MB #3: M104



Block 2: M104 1mm Root-N



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
Modified: 1/9/2013 2:49:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Magenta Box #1: Dong		<input type="checkbox"/>	✓			
MB #1: Kit		<input type="checkbox"/>	✓			
MB #1: Nip		<input type="checkbox"/>	✓			
MB#2: IR50		<input type="checkbox"/>	✓			
MB #2: M104		<input type="checkbox"/>	✓			
MB #2: Nip		<input type="checkbox"/>	✓			
MB #3: Dong		<input type="checkbox"/>	✓			
MB #3: Kit		<input type="checkbox"/>	✓			
MB #3: M104		<input type="checkbox"/>	✓			
Block 2: M104 1mm Root-N		<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:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
Modified: 1/9/2013 2:49:33 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

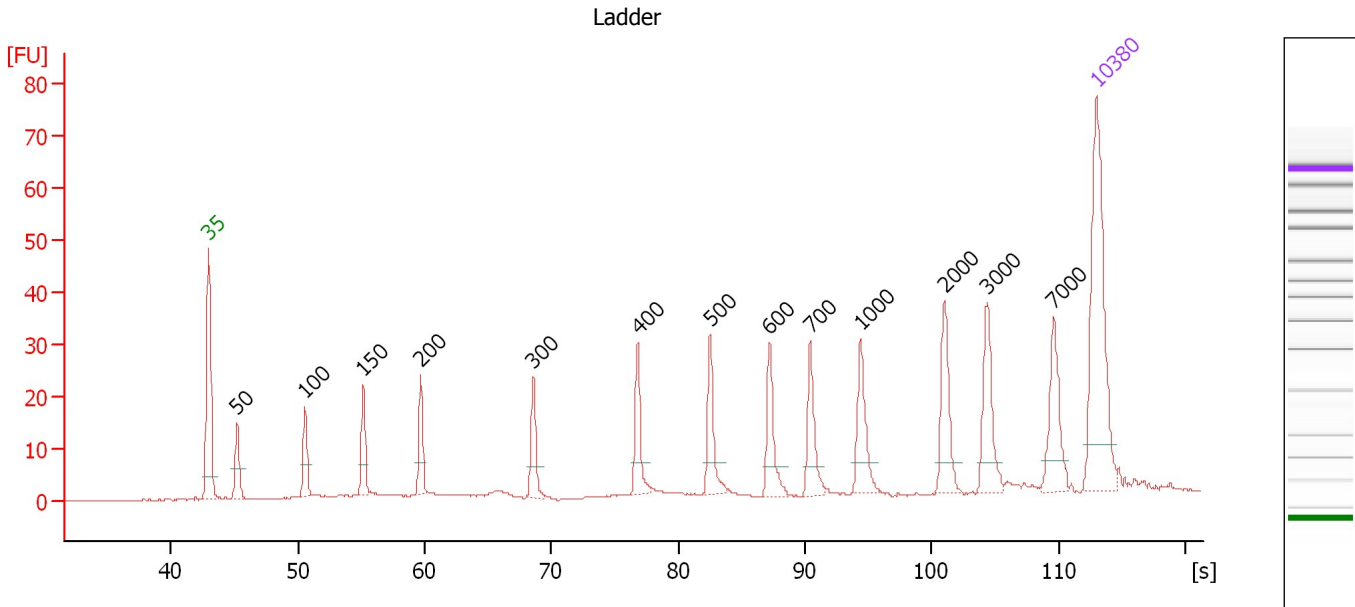
Ladder

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:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

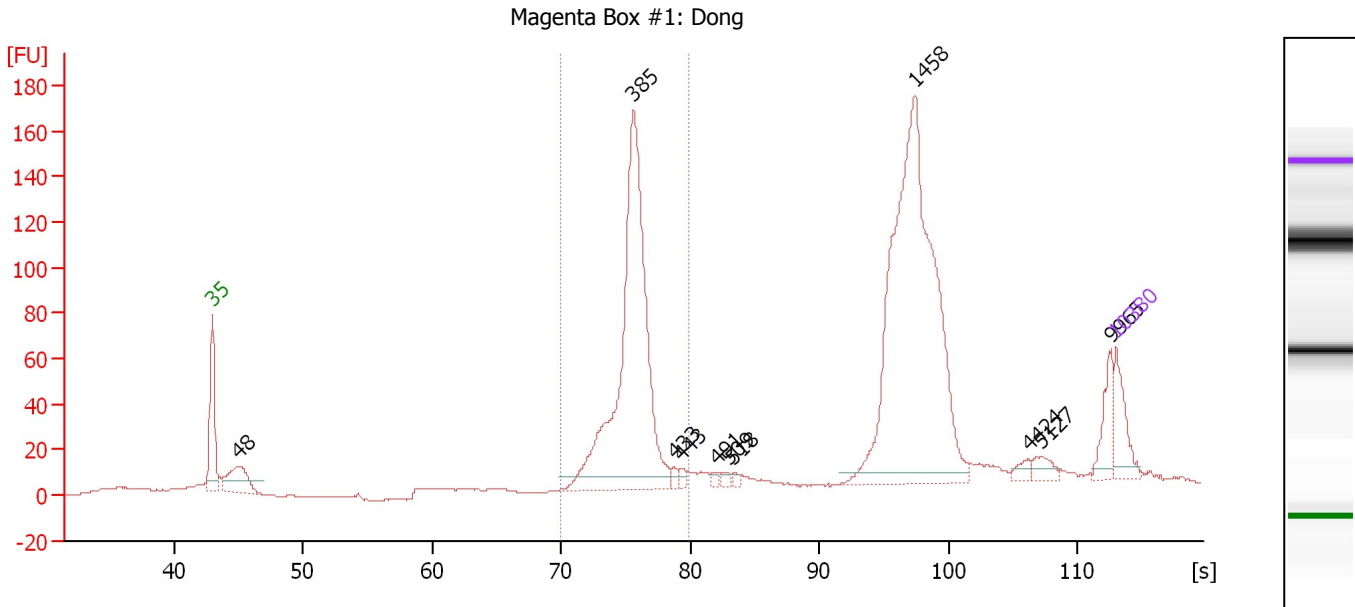
Peak table for Ladder

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:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Magenta Box #1: Dong

Number of peaks found: 11 Corr. Area 1: 534.5
 Noise: 0.2

Peak table for sample 1 : Magenta Box #1: Dong

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	148.74	4,688.0	
3	385	1,038.77	4,084.1	
4	433	12.05	42.1	
5	443	12.82	43.8	
6	491	9.74	30.0	
7	509	11.85	35.3	
8	518	9.08	26.6	
9	1,458	1,062.01	1,103.6	
10	4,424	17.64	6.0	
11	5,127	26.53	7.8	
12	9,965	63.27	9.6	
13	10,380	75.00	10.9	Upper Marker

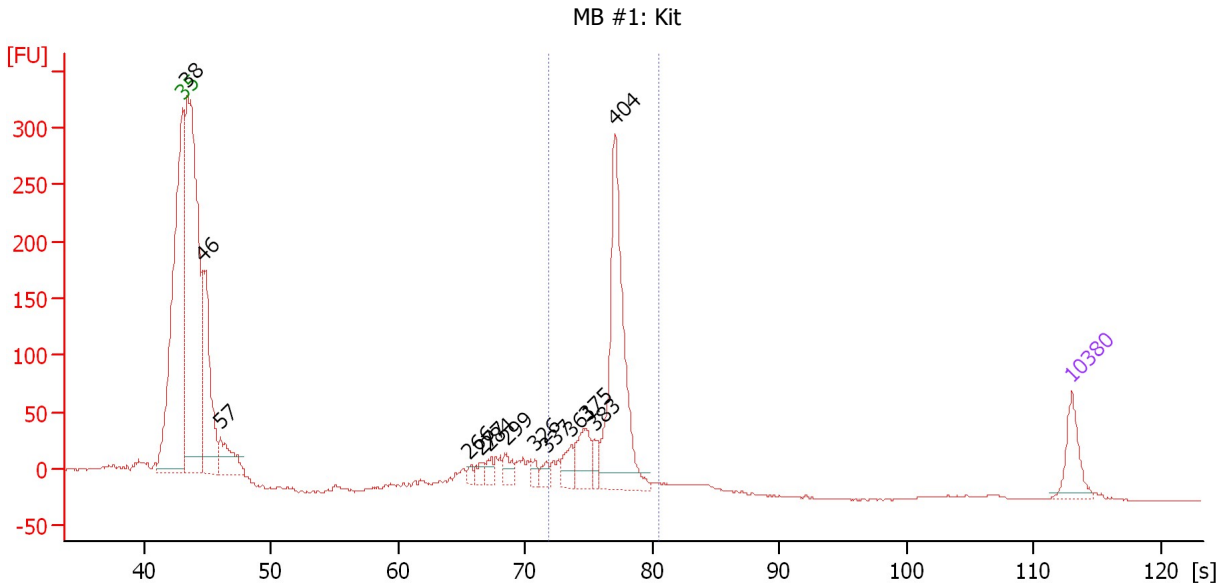
Region table for sample 1 : Magenta Box #1: Dong

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area % of Total	Size distribution in CV [%]	Color	
70.04	79.88	384	4,209.1	1,065.37	534.5	35	5.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : MB #1: Kit

Height Threshold [FU] : 15

Overall Results for sample 2 : MB #1: Kit

Number of peaks found: 13 Corr. Area 1: 722.9
 Noise: 0.5

Peak table for sample 2 : MB #1: Kit

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	38	1,709.93	68,497.4	
3	46	530.45	17,467.7	
4	57	150.43	3,965.9	
5	266	21.09	120.2	
6	277	28.91	158.2	
7	284	28.32	151.3	
8	299	41.77	211.4	
9	326	23.04	107.1	
10	337	26.89	120.9	
11	361	55.36	232.6	
12	375	105.94	428.1	
13	383	36.61	144.8	
14	404	584.72	2,194.3	
15	10,380	75.00	10.9	Upper Marker

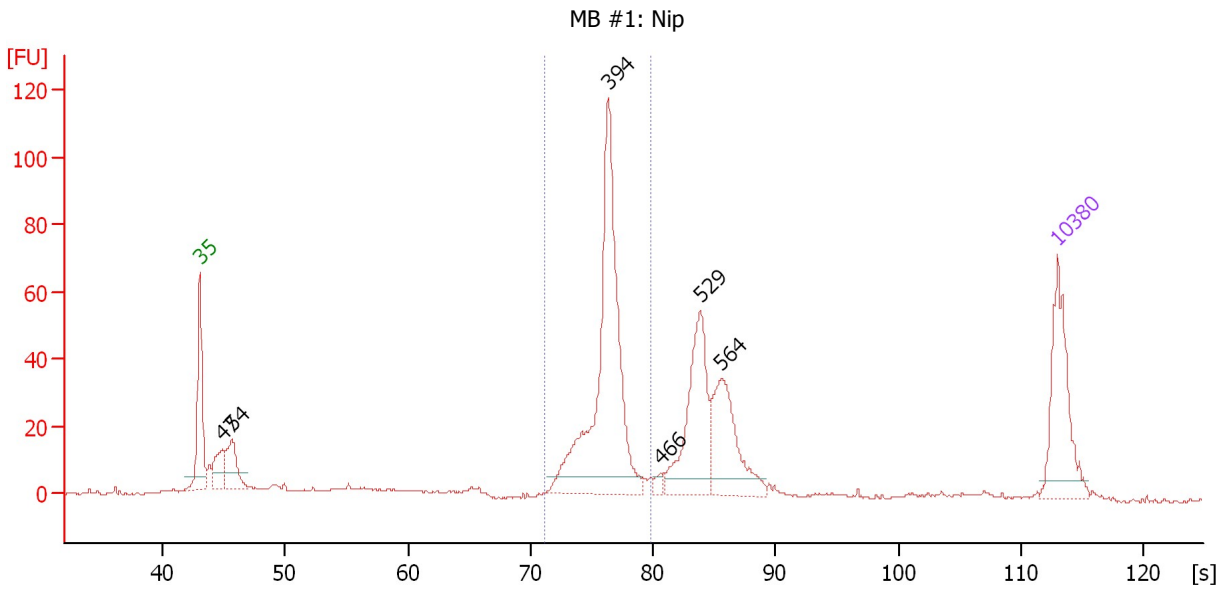
Region table for sample 2 : MB #1: Kit

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.78	80.54	398	2,955.4	773.51	722.9 29	5.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : MB #1: Nip

Number of peaks found: 6 Corr. Area 1: 314.9
 Noise: 0.3

Peak table for sample 3 : MB #1: Nip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	41.39	1,325.8	
3	54	54.25	1,533.1	
4	394	325.92	1,254.4	
5	466	5.64	18.4	
6	529	130.76	374.7	
7	564	101.95	274.1	
8	10,380	75.00	10.9	Upper Marker

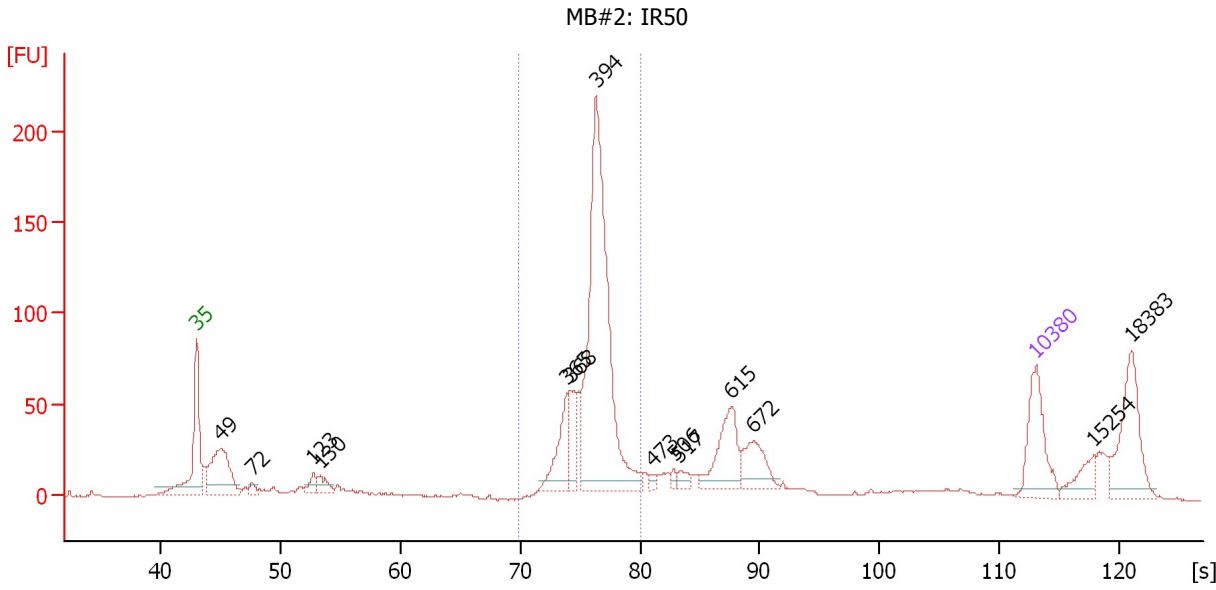
Region table for sample 3 : MB #1: Nip

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
71.10	79.87	392	1,341.0	346.05	314.9 43	5.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : MB#2: IR50

Number of peaks found: 14 Corr. Area 1: 738.3
 Noise: 0.5

Peak table for sample 4 : MB#2: IR50

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	163.12	5,067.1	
3	72	12.68	265.9	
4	123	22.11	271.9	
5	130	26.14	305.7	
6	365	89.08	370.1	
7	368	47.73	196.5	
8	394	555.44	2,135.9	
9	473	7.24	23.2	
10	506	7.38	22.1	
11	517	13.59	39.8	
12	615	92.10	227.0	
13	672	61.96	139.8	
14	10,380	75.00	10.9	Upper Marker
15	15,254	0.00	0.0	
16	18,383	0.00	0.0	

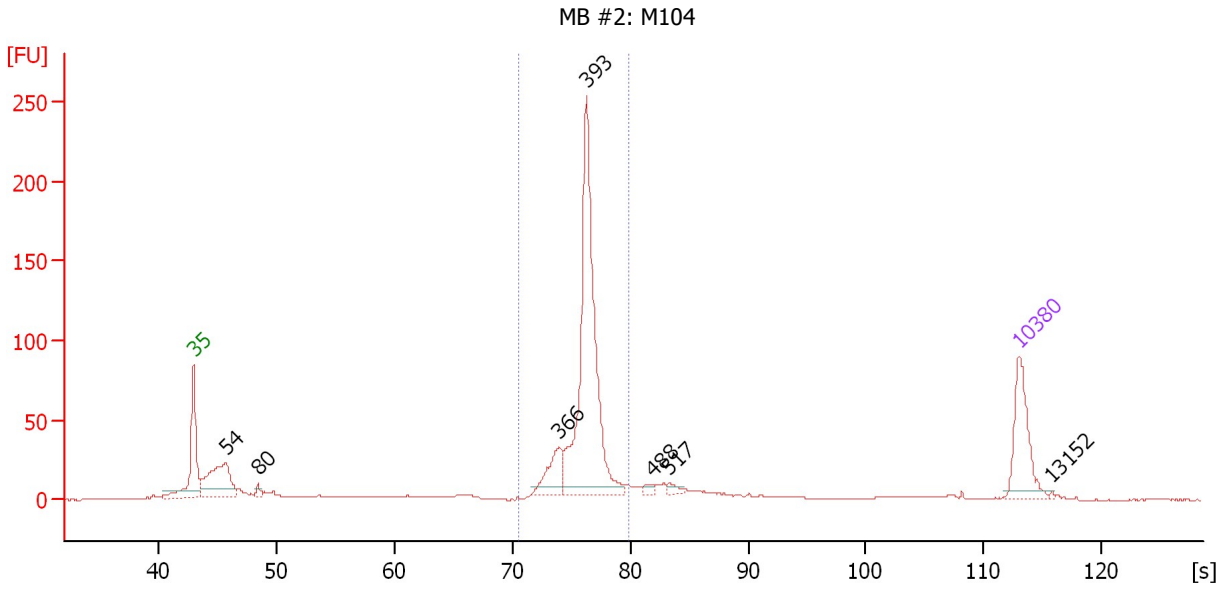
Region table for sample 4 : MB#2: IR50

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
69.87	80.15	392	2,977.4	769.03	738.3	46	5.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MB #2: M104

Number of peaks found: 7 Corr. Area 1: 560.5
 Noise: 0.2

Peak table for sample 5 : MB #2: M104

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	153.48	4,294.7	
3	80	8.82	166.7	
4	366	58.79	243.5	
5	393	438.02	1,686.9	
6	488	6.40	19.9	
7	517	8.34	24.4	
8	10,380	75.00	10.9	Upper Marker
9	13,152	0.00	0.0	

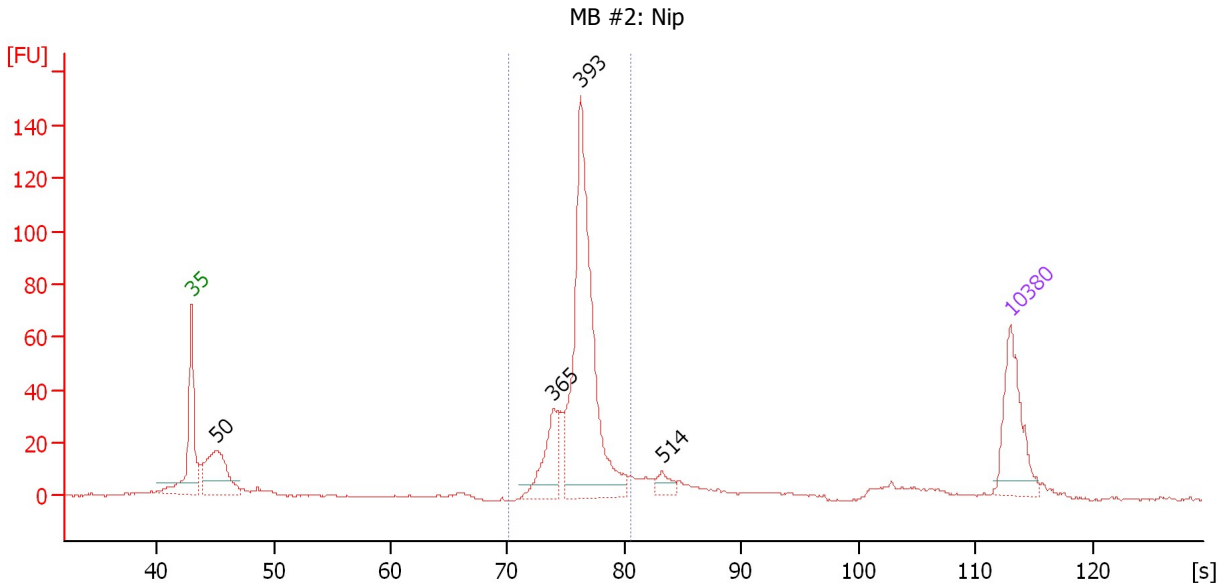
Region table for sample 5 : MB #2: M104

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
70.54	79.82	392	2,090.5	539.65	560.5	60	4.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : MB #2: Nip

Number of peaks found: 4 Corr. Area 1: 449.0
 Noise: 0.3

Peak table for sample 6 : MB #2: Nip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	130.53	3,977.2	
3	365	71.40	296.5	
4	393	386.92	1,492.9	
5	514	16.46	48.5	
6	10,380	75.00	10.9	Upper Marker

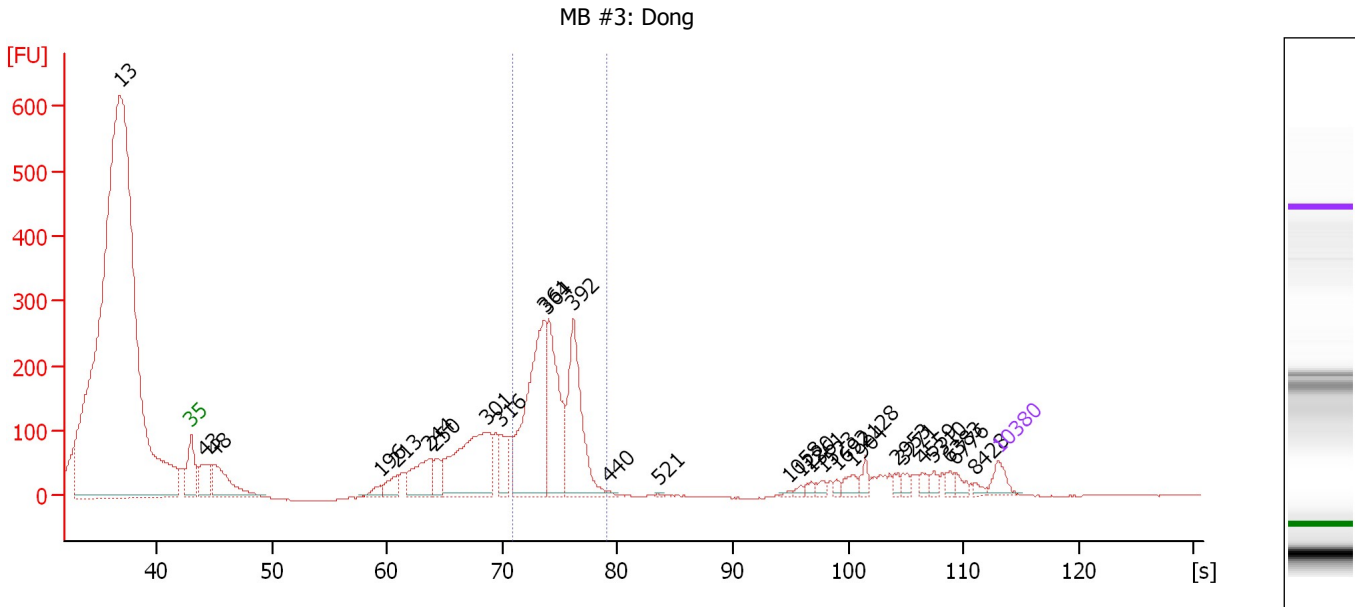
Region table for sample 6 : MB #2: Nip

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
70.10	80.46	393	1,856.8	481.04	449.0	63	5.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : MB #3: Dong

Number of peaks found: 28 Corr. Area 1: 1,230.8
 Noise: 1.0

Peak table for sample 7 : MB #3: Dong


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	13	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	43	340.71	11,979.5	
4	48	539.31	16,997.9	
5	196	62.22	481.5	
6	213	125.82	896.9	
7	244	361.21	2,241.9	
8	250	133.80	809.5	
9	301	995.68	5,011.6	
10	316	187.01	897.5	
11	361	1,214.48	5,092.1	
12	364	815.68	3,398.8	
13	392	822.15	3,179.2	
14	440	13.07	45.0	
15	521	5.24	15.2	
16	1,058	9.74	14.0	
17	1,220	19.71	24.5	
18	1,361	25.82	28.8	
19	1,523	29.37	29.2	
20	1,692	20.84	18.7	
21	1,904	50.76	40.4	
22	2,128	48.06	34.2	
23	2,953	27.69	14.2	
24	3,271	33.43	15.5	
25	4,559	33.01	11.0	
26	5,310	33.69	9.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad


Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...

... Peak table for sample 7 : MB #3: Dong

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	6,383	31.52	7.5	
28	6,776	41.09	9.2	
29	8,428	20.48	3.7	
30	 10,380	75.00	10.9	Upper Marker

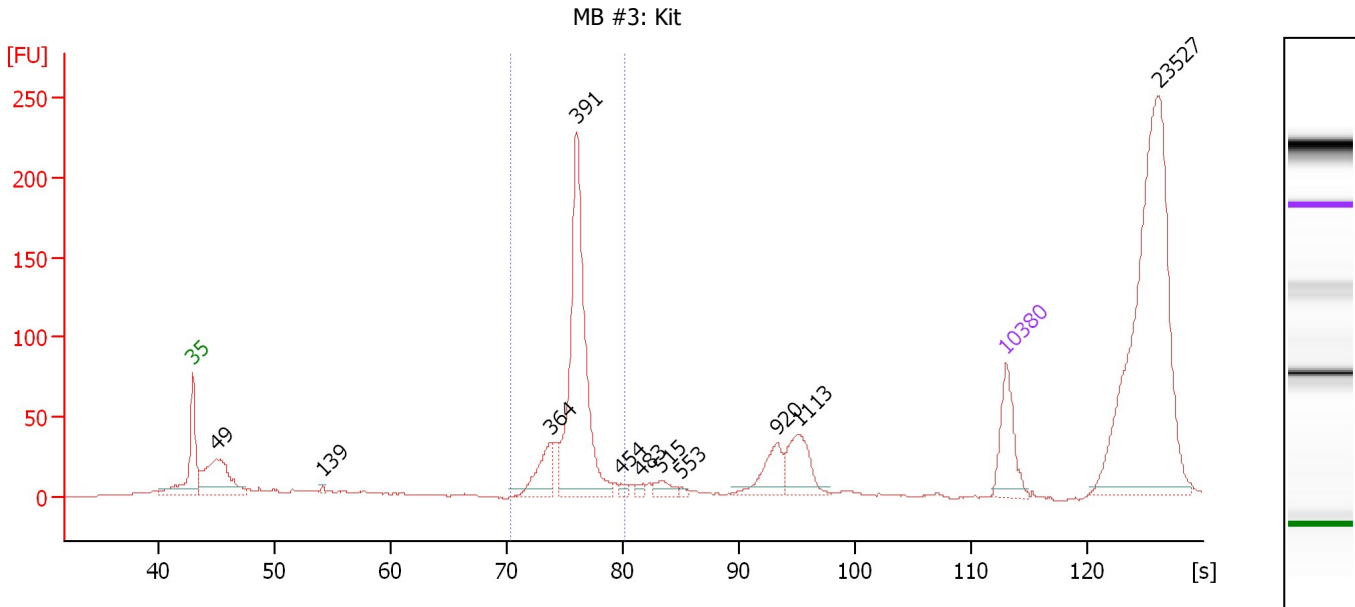
Region table for sample 7 : MB #3: Dong

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
70.89	78.98	369	8,524.6	2,073.34	1,230.8 20	5.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : MB #3: Kit

Number of peaks found: 11 Corr. Area 1: 523.2
 Noise: 0.5

Peak table for sample 8 : MB #3: Kit

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	200.74	6,258.8	
3	139	5.20	56.6	
4	364	79.18	329.3	
5	391	469.89	1,822.8	
6	454	7.91	26.4	
7	483	8.34	26.1	
8	515	22.31	65.6	
9	553	4.31	11.8	
10	920	62.94	103.6	
11	1,113	78.68	107.2	
12	10,380	75.00	10.9	Upper Marker
13	23,527	0.00	0.0	

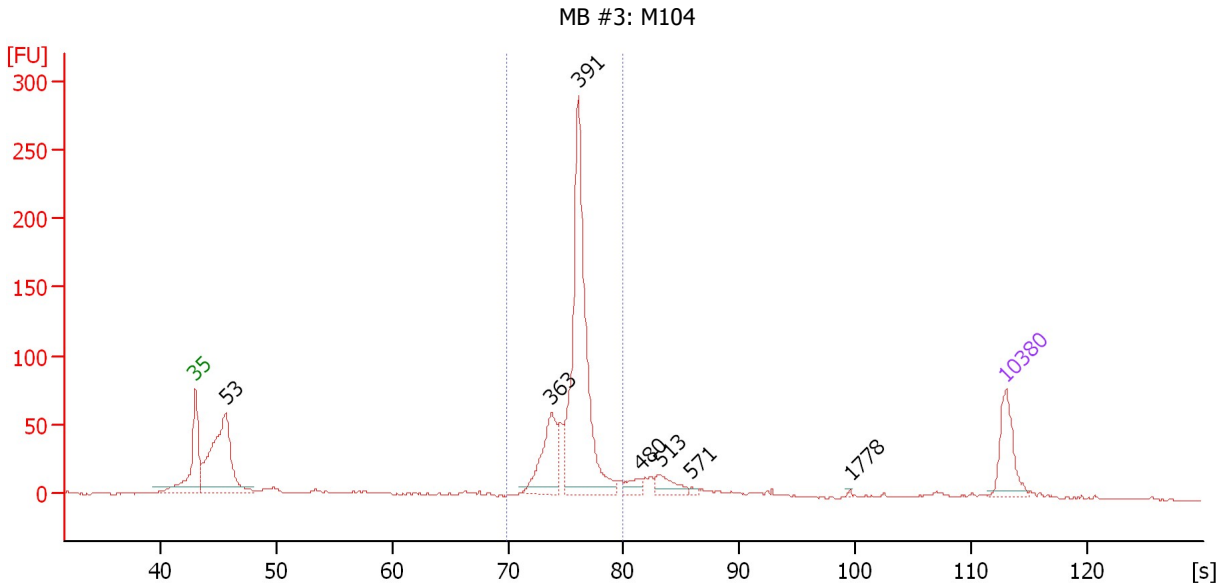
Region table for sample 8 : MB #3: Kit

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
70.34	80.13	389	2,151.4	551.28	523.2 33	4.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : MB #3: M104

Number of peaks found: 7 Corr. Area 1: 691.1
 Noise: 0.5

Peak table for sample 9 : MB #3: M104

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	415.70	11,814.5	
3	363	146.09	610.3	
4	391	566.64	2,196.9	
5	480	24.23	76.5	
6	513	39.57	116.8	
7	571	5.37	14.3	
8	1,778	1.33	1.1	
9	10,380	75.00	10.9	Upper Marker

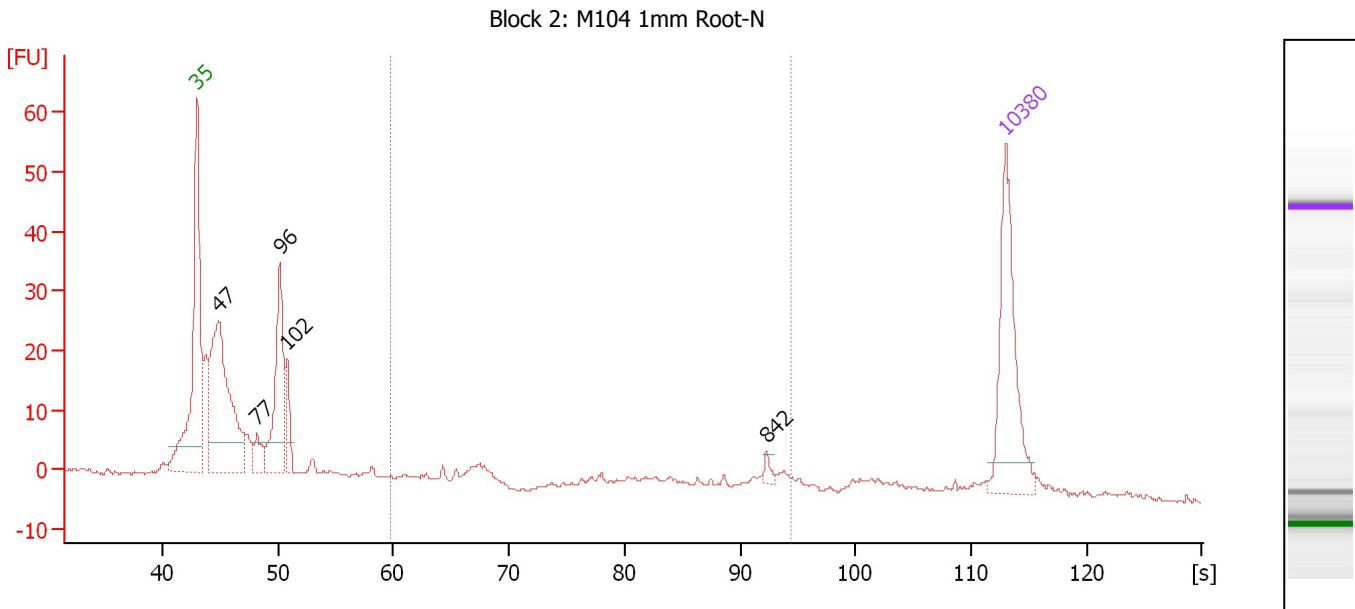
Region table for sample 9 : MB #3: M104

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
69.86	79.85	387	3,096.6	789.32	691.1 56	5.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
 Modified: 1/9/2013 2:49:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Block 2: M104 1mm Root-N

Number of peaks found: 5 Corr. Area 1: 33.4
 Noise: 0.3

Peak table for sample 10 : Block 2: M104 1mm Root-N

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	227.06	7,254.1	
3	77	20.59	403.5	
4	96	119.86	1,890.8	
5	102	30.07	444.6	
6	842	4.58	8.2	
7	10,380	75.00	10.9	Upper Marker

Region table for sample 10 : Block 2: M104 1mm Root-N

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area % of Total	Size distribution in CV [%]	Color
59.73	94.41	574	168.9	46.18	33.4	11	42.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
Modified: 1/9/2013 2:49:33 PM

Gel Image

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad

Created: 1/9/2013 2:11:02 PM
Modified: 1/9/2013 2:49:33 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay Created: 1/9/2013 2:11:02 PM
 Data Path: C:\...ttings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad Modified: 1/9/2013 2:49:33 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		1/9/2013 2:49:29 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-01-09\2013-01-09\2013-01-09_001.xad)		Instrument	Run		1/9/2013 2:11:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/9/2013 2:11:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/9/2013 2:11:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/9/2013 2:11:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/9/2013 2:11:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/9/2013 2:11:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/9/2013 2:11:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1