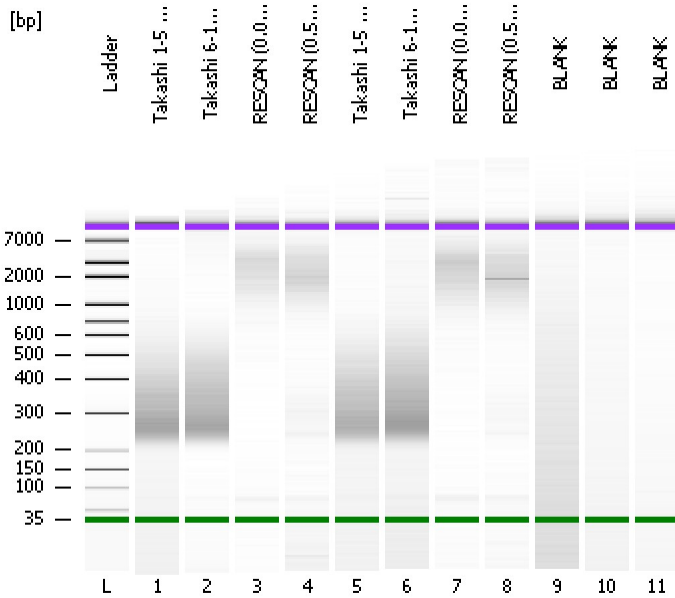


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
Modified: 5/18/2012 12:29:35 PM

Electrophoresis File Run Summary



Instrument Information:

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

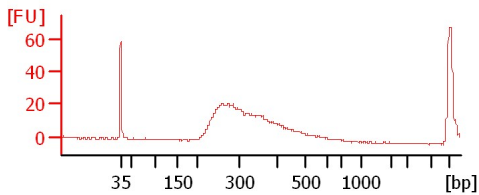
Assay Information:

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

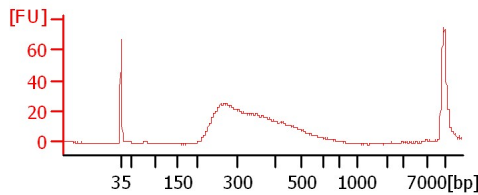
Chip Information:

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

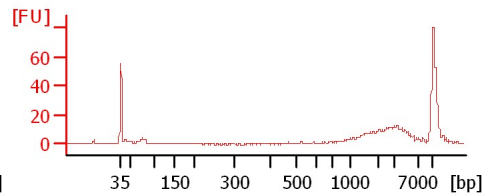
Takashi 1-5 (0.5 uM Adapter)



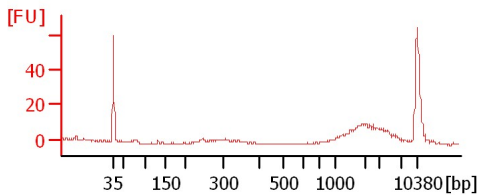
Takashi 6-16 (1 uM Adapter)



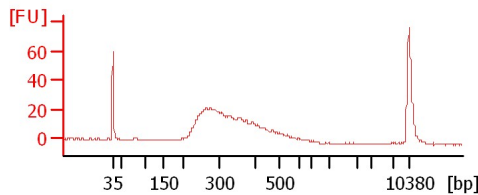
RESCAN (0.05 uM Adapter)



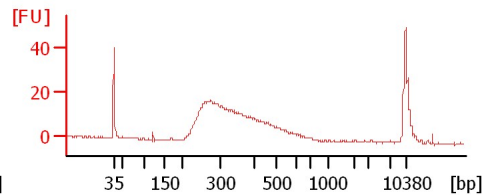
RESCAN (0.5 uM Adapter)



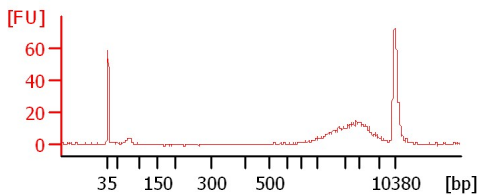
Takashi 1-5 (0.5 uM Adapter)



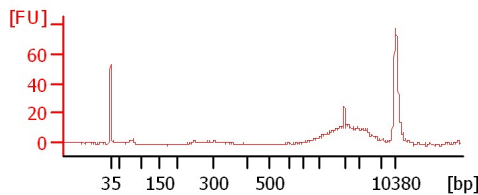
Takashi 6-16 (1 uM Adapter)



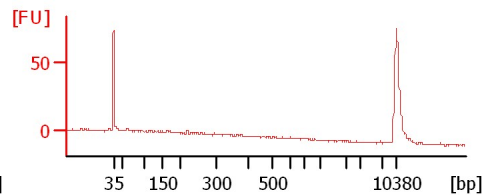
RESCAN (0.05 uM Adapter)



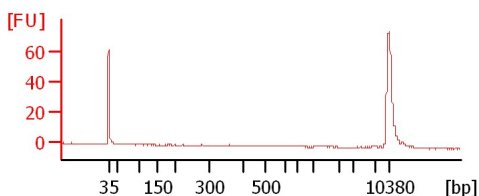
RESCAN (0.5 uM Adapter)



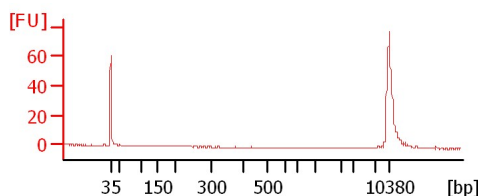
BLANK



BLANK



BLANK



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
Modified: 5/18/2012 12:29:35 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Takashi 1-5 (0.5 uM Adapter)		<input type="checkbox"/>	✓			
Takashi 6-16 (1 uM Adapter)		<input type="checkbox"/>	✓			
RESCAN (0.05 uM Adapter)		<input type="checkbox"/>	✓			
RESCAN (0.5 uM Adapter)		<input type="checkbox"/>	✓			
Takashi 1-5 (0.5 uM Adapter)		<input type="checkbox"/>	✓			
Takashi 6-16 (1 uM Adapter)		<input type="checkbox"/>	✓			
RESCAN (0.05 uM Adapter)		<input type="checkbox"/>	✓			
RESCAN (0.5 uM Adapter)		<input type="checkbox"/>	✓			
BLANK		<input type="checkbox"/>	✓			
BLANK		<input type="checkbox"/>	✓			
BLANK		<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\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
Modified: 5/18/2012 12:29:35 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

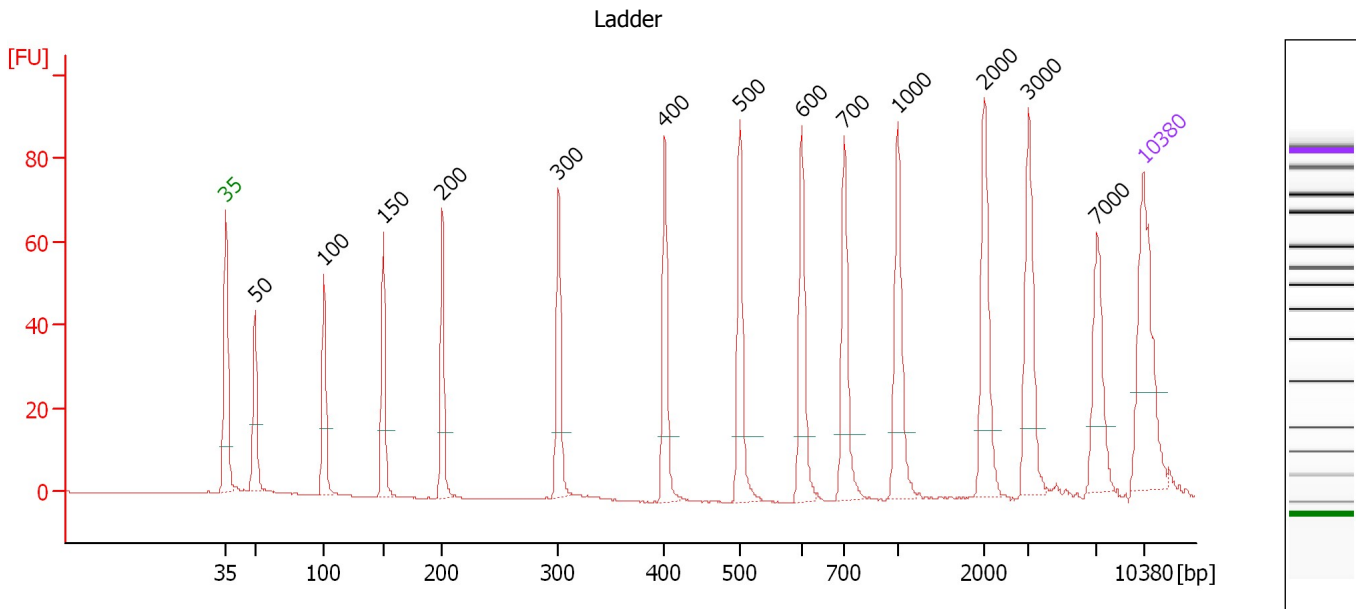
Ladder

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\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

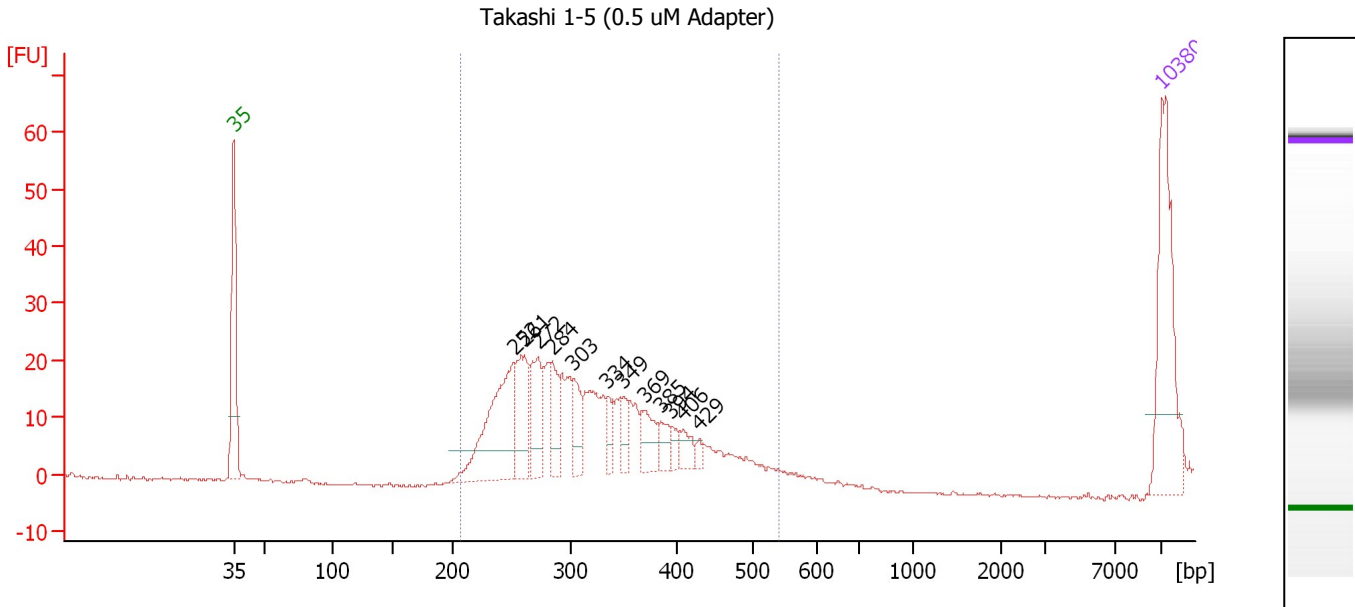
Peak table for Ladder

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:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Takashi 1-5 (0.5 uM Adapter)

Number of peaks found: 12 Corr. Area 1: 369.0
 Noise: 0.2

Peak table for sample 1 : Takashi 1-5 (0.5 uM Adapter)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	252	116.36	699.7	
3	261	57.40	333.2	
4	272	48.01	267.1	
5	284	32.78	174.8	
6	303	27.47	137.6	
7	334	14.49	65.7	
8	349	16.10	69.8	
9	369	24.86	102.0	
10	385	12.85	50.6	
11	394	8.51	32.7	
12	406	12.49	46.6	
13	429	4.59	16.2	
14	10,380	75.00	10.9	Upper Marker

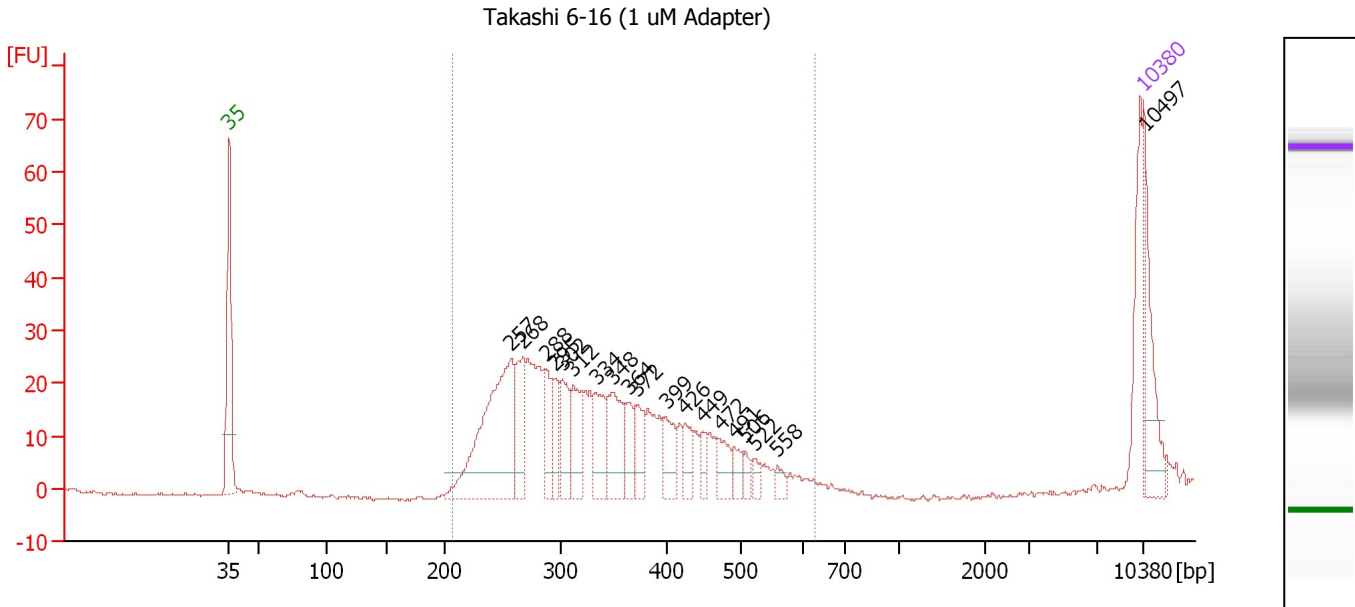
Region table for sample 1 : Takashi 1-5 (0.5 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	2,726.4	315	537.83	540	369.0	100	20.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Takashi 6-16 (1 uM Adapter)

Number of peaks found: 19 Corr. Area 1: 509.3
 Noise: 0.3

Peak table for sample 2 : Takashi 6-16 (1 uM Adapter)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	257	314.57	1,852.6	
3	268	86.61	489.9	
4	288	55.22	290.9	
5	295	47.88	245.9	
6	302	69.53	348.7	
7	312	74.18	360.0	
8	334	69.65	316.1	
9	348	92.56	402.4	
10	364	41.96	174.6	
11	372	48.75	198.4	
12	399	47.75	181.1	
13	426	32.06	114.2	
14	449	21.18	71.5	
15	472	34.03	109.3	
16	491	20.62	63.6	
17	506	15.77	47.2	
18	522	14.16	41.1	
19	558	12.37	33.6	
20	10,380	75.00	10.9	Upper Marker
21	10,497	0.00	0.0	

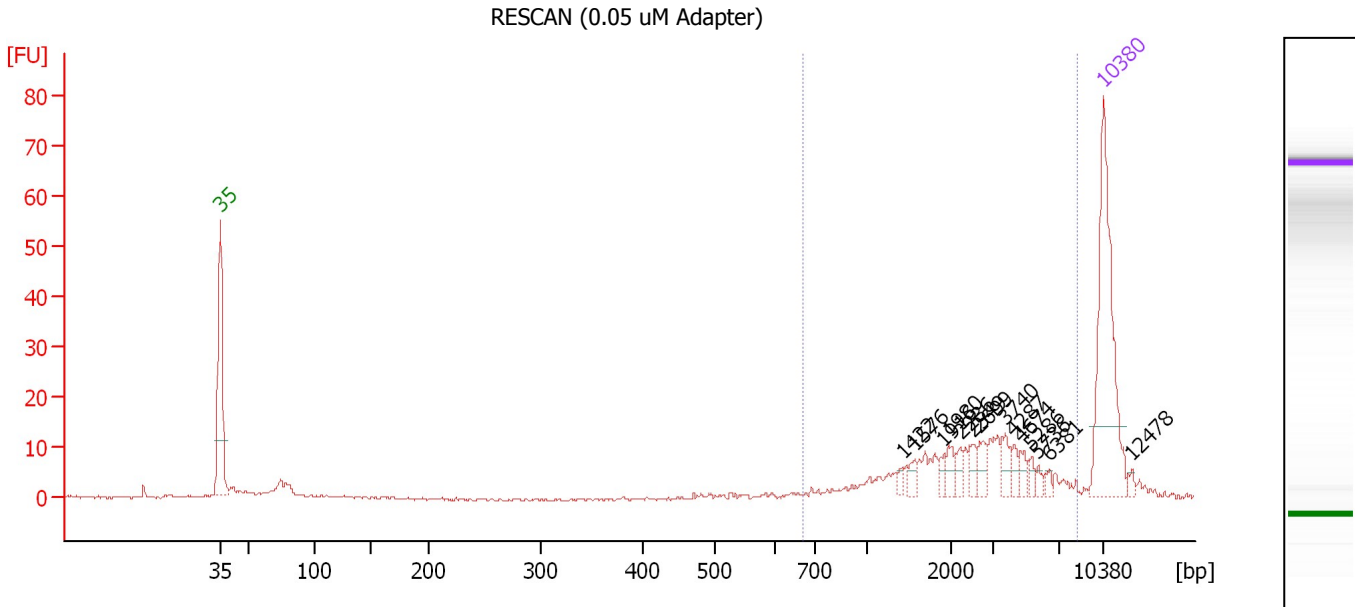
Region table for sample 2 : Takashi 6-16 (1 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	6,106.5	338	1,261.97	629	509.3	92	24.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : RESCAN (0.05 uM Adapter)

Number of peaks found: 14 Corr. Area 1: 118.6
 Noise: 0.2

Peak table for sample 3 : RESCAN (0.05 uM Adapter)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,422	2.87	3.1	
3	1,576	4.42	4.2	
4	1,916	4.31	3.4	
5	1,980	6.33	4.8	
6	2,236	4.85	3.3	
7	2,549	6.08	3.6	
8	2,699	7.15	4.0	
9	3,740	7.54	3.1	
10	4,287	4.51	1.6	
11	4,674	4.91	1.6	
12	5,286	3.51	1.0	
13	5,736	2.40	0.6	
14	6,381	2.46	0.6	
15	10,380	75.00	10.9	Upper Marker
16	12,478	0.00	0.0	

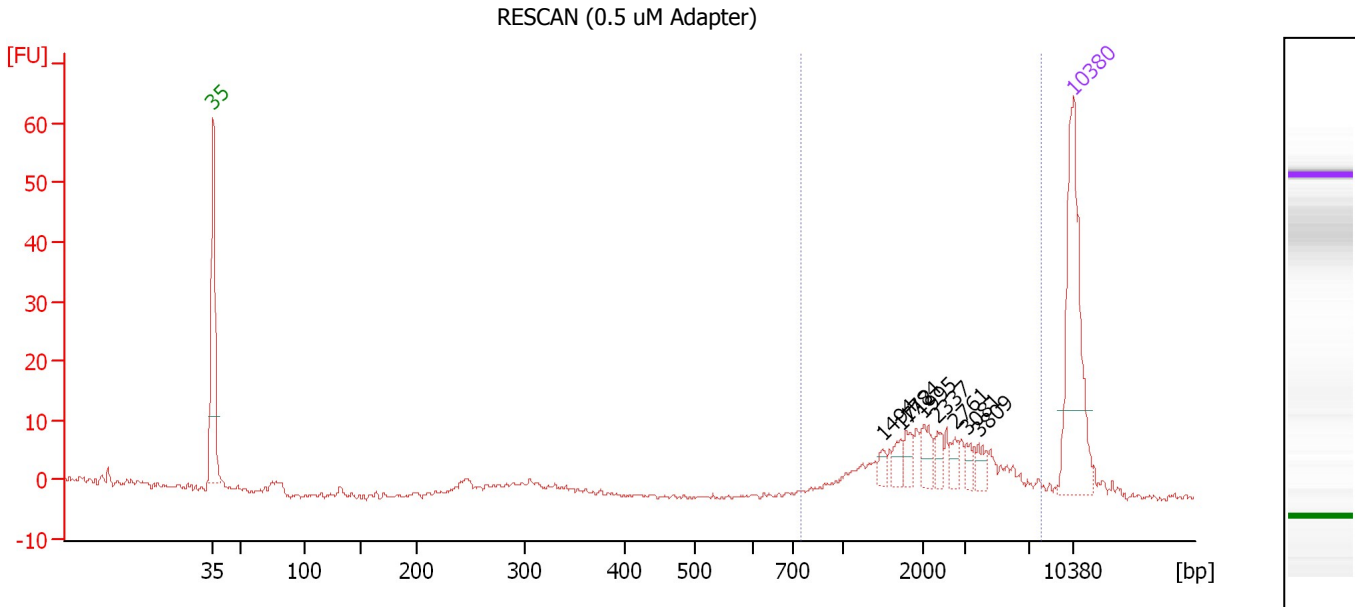
Region table for sample 3 : RESCAN (0.05 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
669	76.0	2,959	109.10	8,402	118.6	82	56.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : RESCAN (0.5 uM Adapter)

Number of peaks found: 8 Corr. Area 1: 114.3
 Noise: 0.4

Peak table for sample 4 : RESCAN (0.5 uM Adapter)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,494	5.08	5.1	
3	1,712	6.52	5.8	
4	1,784	7.85	6.7	
5	1,995	10.93	8.3	
6	2,337	6.75	4.4	
7	2,761	5.66	3.1	
8	3,081	5.79	2.8	
9	3,809	6.55	2.6	
10	10,380	75.00	10.9	Upper Marker

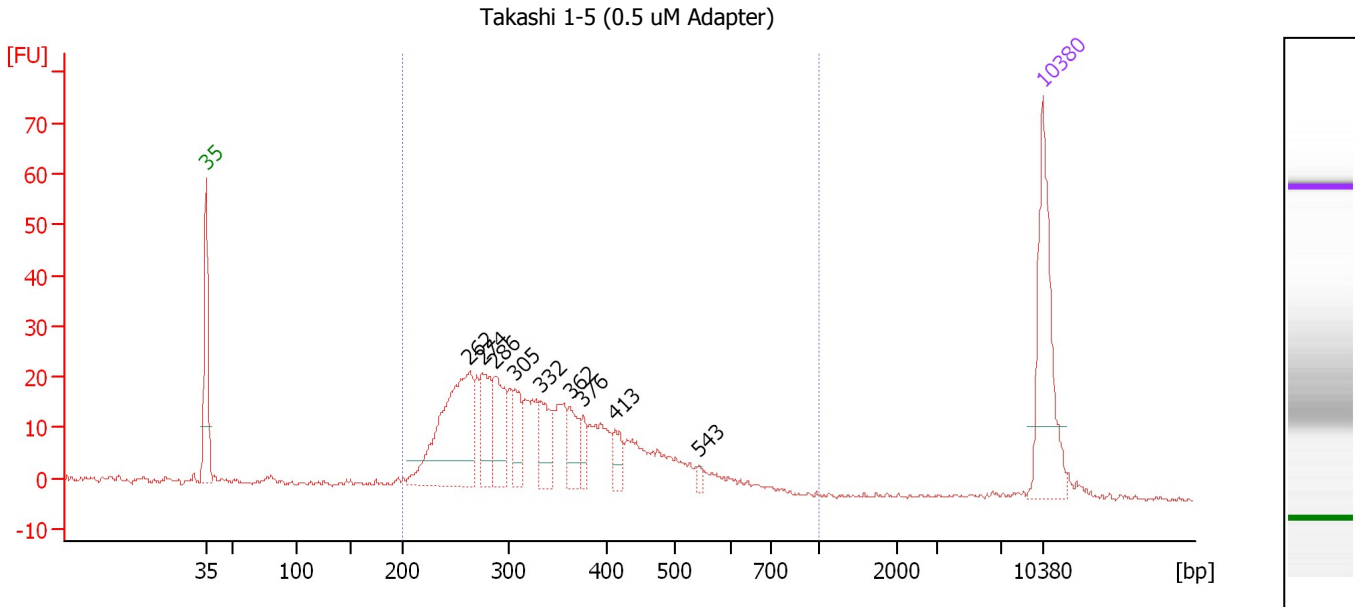
Region table for sample 4 : RESCAN (0.5 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
748	86.7	2,698	120.05	7,844	114.3	84	55.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Takashi 1-5 (0.5 uM Adapter)

Number of peaks found: 9 Corr. Area 1: 491.4
 Noise: 0.5

Peak table for sample 5 : Takashi 1-5 (0.5 uM Adapter)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	160.85	929.1	
3	274	49.31	272.3	
4	286	52.84	279.5	
5	305	28.88	143.5	
6	332	33.32	152.0	
7	362	27.35	114.4	
8	376	14.81	59.7	
9	413	17.47	64.1	
10	543	4.31	12.0	
11	10,380	75.00	10.9	Upper Marker

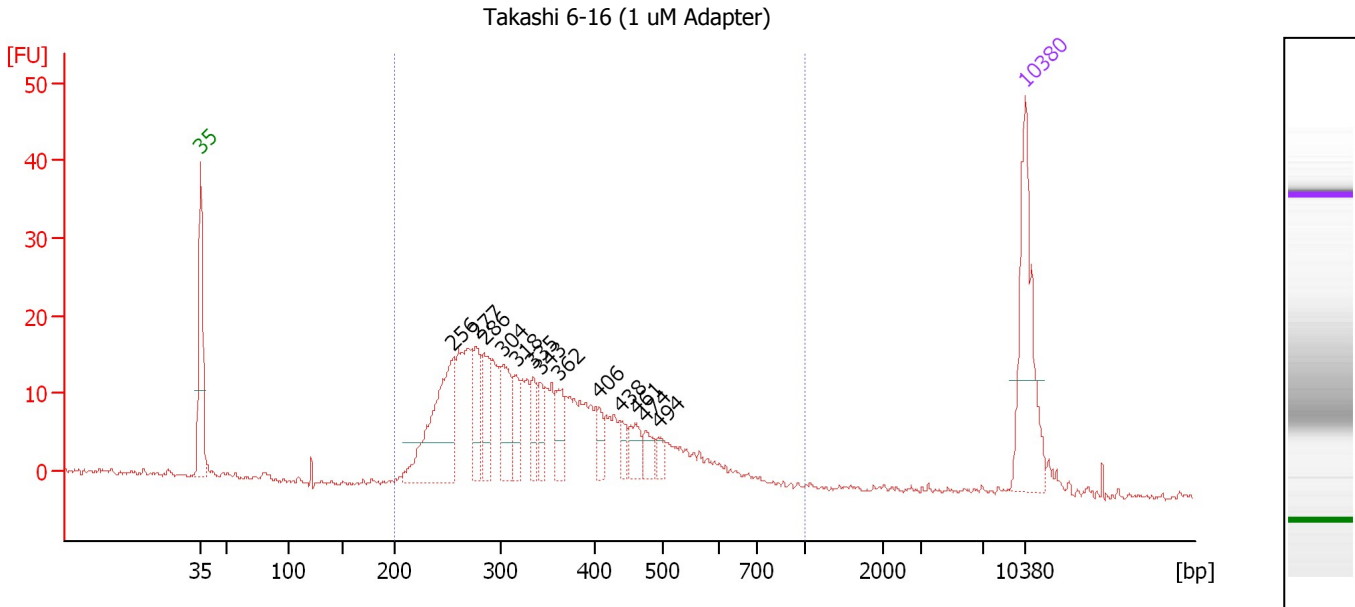
Region table for sample 5 : Takashi 1-5 (0.5 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,157.0	344	654.74	1,000	491.4	94	27.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Takashi 6-16 (1 uM Adapter)

Number of peaks found: 13 Corr. Area 1: 376.3
 Noise: 0.4

Peak table for sample 6 : Takashi 6-16 (1 uM Adapter)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	256	130.66	773.9	
3	277	42.14	230.3	
4	286	37.10	196.6	
5	304	46.47	231.9	
6	318	24.59	117.3	
7	335	22.68	102.6	
8	343	21.21	93.8	
9	362	25.98	108.8	
10	406	15.51	57.9	
11	438	11.33	39.2	
12	461	18.46	60.6	
13	474	13.80	44.1	
14	494	8.35	25.6	
15	10,380	75.00	10.9	Upper Marker

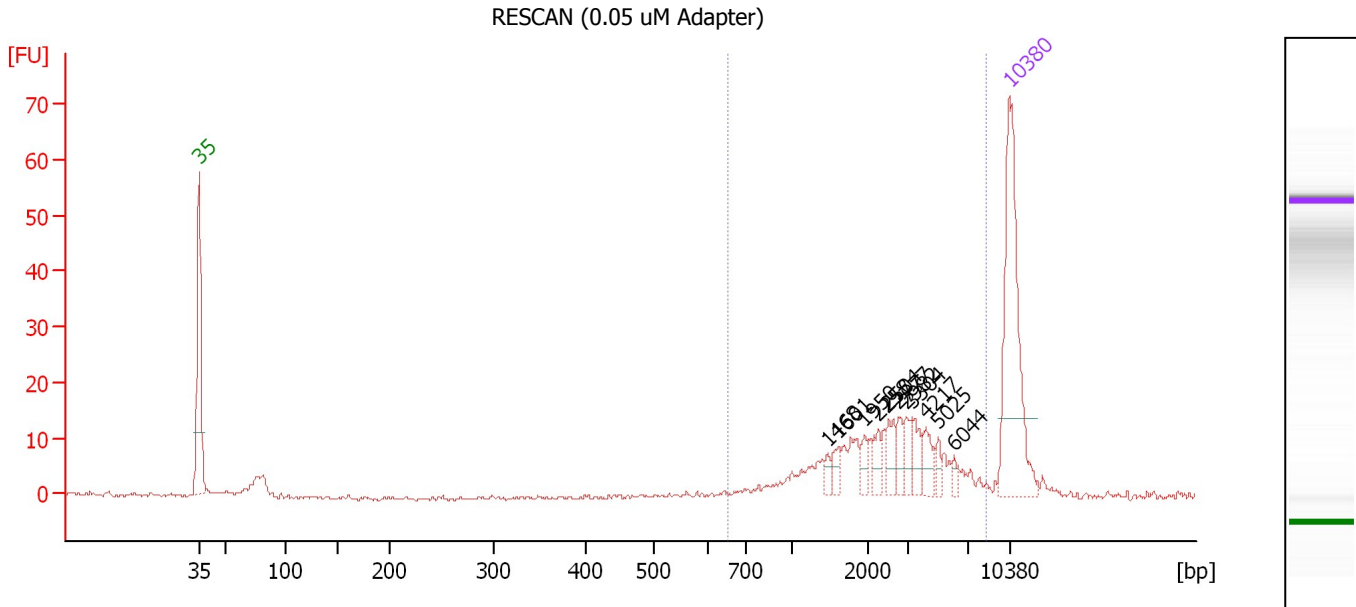
Region table for sample 6 : Takashi 6-16 (1 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	3,658.7	357	779.86	1,000	376.3	98	29.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : RESCAN (0.05 uM Adapter)

Number of peaks found: 11 Corr. Area 1: 135.1
 Noise: 0.4

Peak table for sample 7 : RESCAN (0.05 uM Adapter)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,468	4.08	4.2	
3	1,601	6.49	6.1	
4	1,950	5.49	4.3	
5	2,258	7.84	5.3	
6	2,504	9.95	6.0	
7	2,777	7.73	4.2	
8	2,982	8.31	4.2	
9	3,304	9.56	4.4	
10	4,217	8.98	3.2	
11	5,025	4.63	1.4	
12	6,044	3.29	0.8	
13	10,380	75.00	10.9	Upper Marker

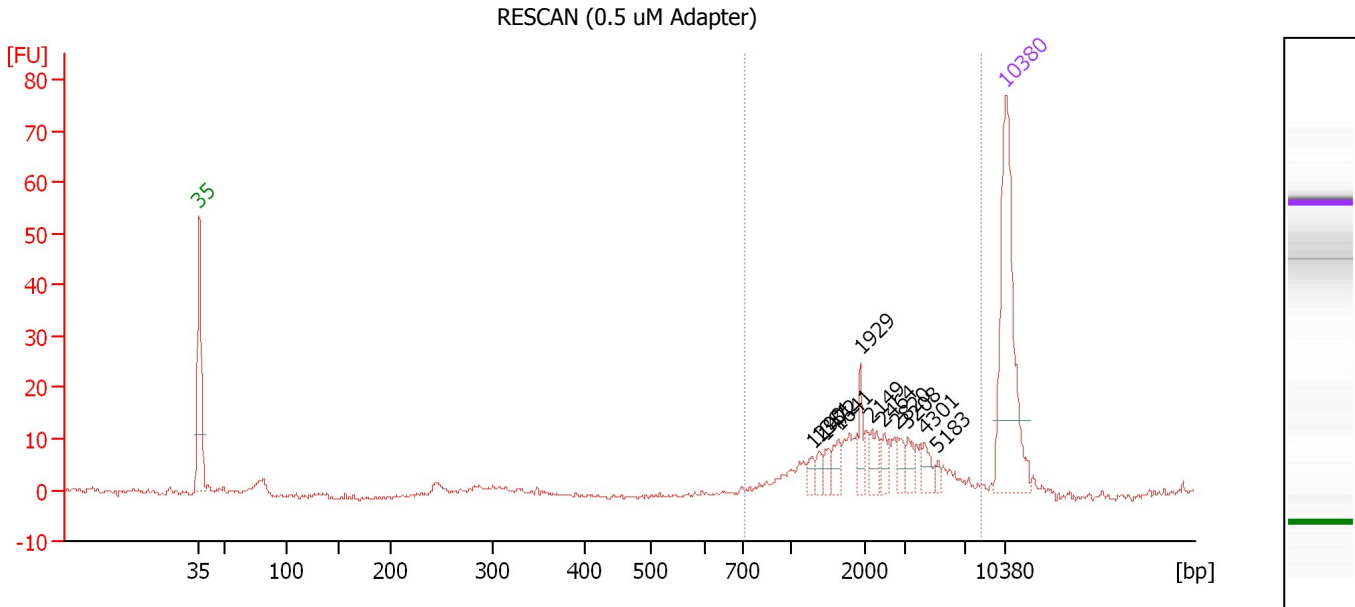
Region table for sample 7 : RESCAN (0.05 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/µl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
655	86.4	2,926	124.62	8,491	135.1	90	55.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : RESCAN (0.5 uM Adapter)

Number of peaks found: 11 Corr. Area 1: 129.8
 Noise: 0.4

Peak table for sample 8 : RESCAN (0.5 uM Adapter)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	1,290	5.01	5.9	
3	1,381	4.95	5.4	
4	1,472	4.93	5.1	
5	1,641	7.95	7.3	
6	1,929	8.42	6.6	
7	2,149	8.78	6.2	
8	2,464	6.85	4.2	
9	2,820	6.11	3.3	
10	3,208	6.85	3.2	
11	4,301	7.98	2.8	
12	5,183	2.75	0.8	
13	10,380	75.00	10.9	Upper Marker

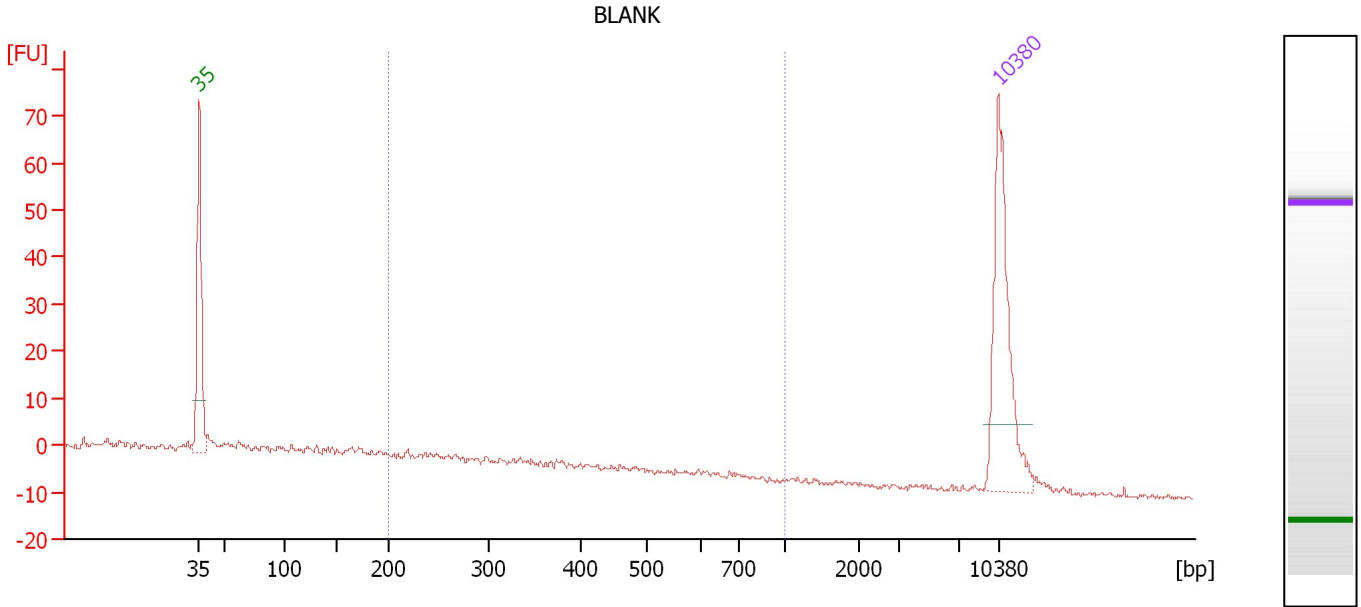
Region table for sample 8 : RESCAN (0.5 uM Adapter)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
716	87.4	2,601	115.96	8,320	129.8	92	56.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : BLANK

Number of peaks found: 0 Corr. Area 1: 46.4
 Noise: 0.4

Peak table for sample 9 : BLANK

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

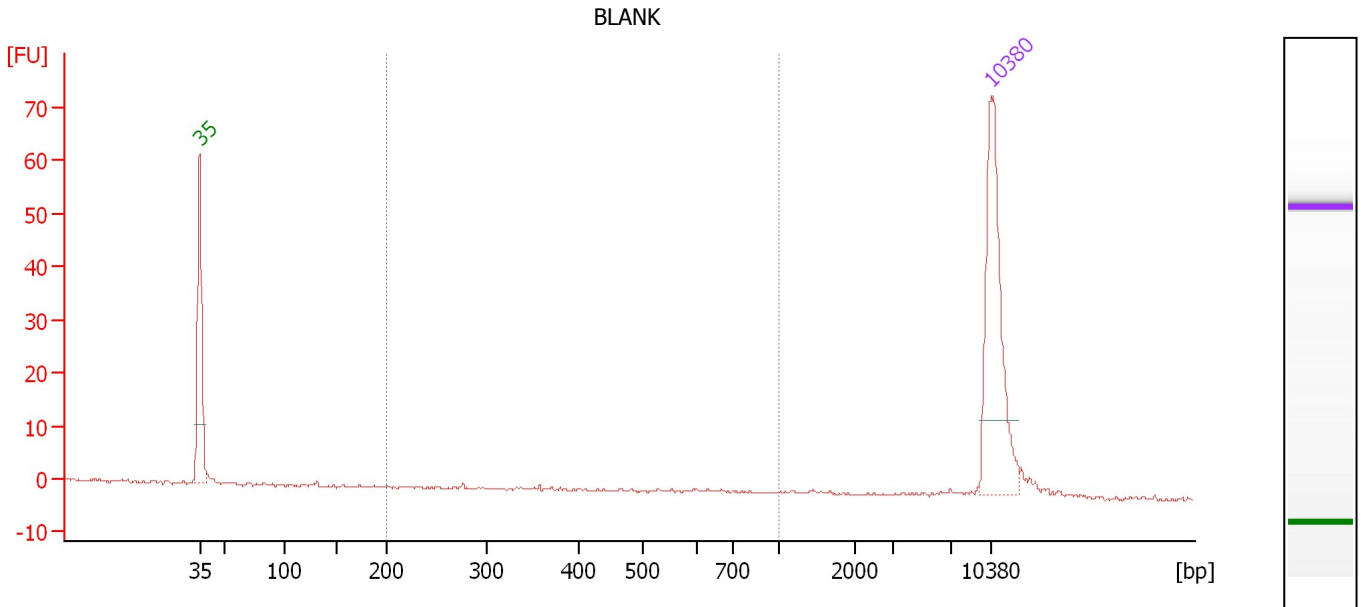
Region table for sample 9 : BLANK

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	244.7	354	49.37	1,000	46.4	32	35.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : BLANK

Number of peaks found: 0 Corr. Area 1: 0.3
 Noise: 0.2

Peak table for sample 10 : BLANK

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

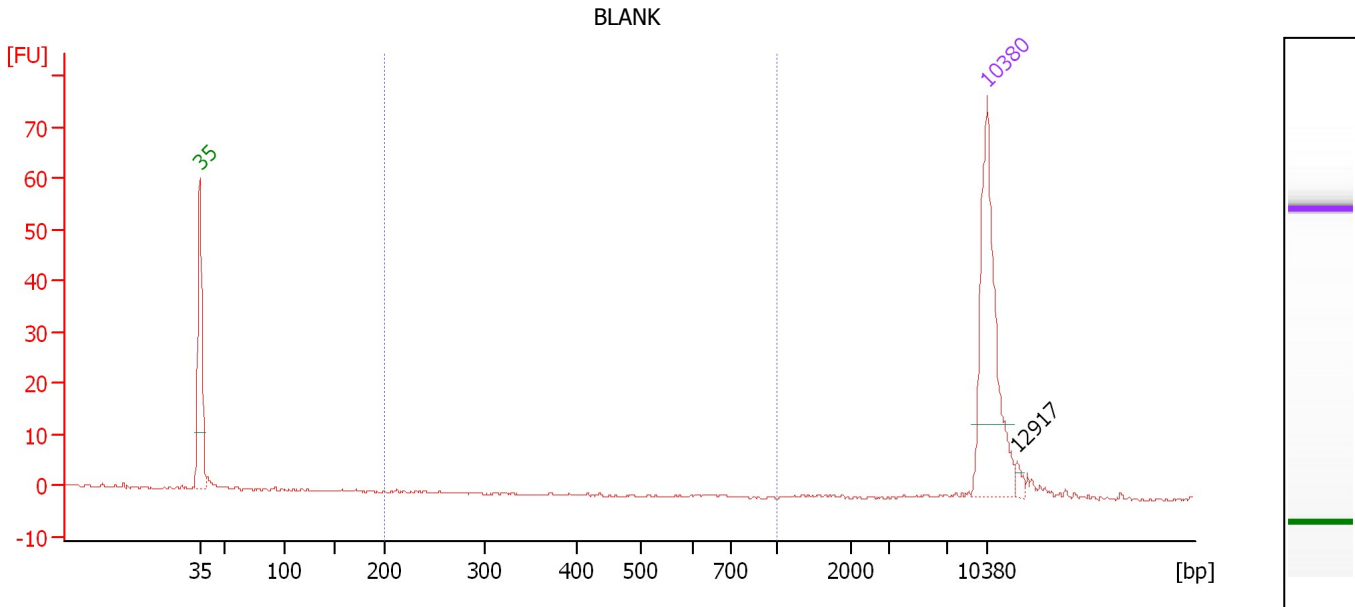
Region table for sample 10 : BLANK

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1.2	420	0.28	1,000	0.3	3	36.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : BLANK

Number of peaks found: 1 Corr. Area 1: 0.0
 Noise: 0.1

Peak table for sample 11 : BLANK

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	12,917	0.00	0.0	

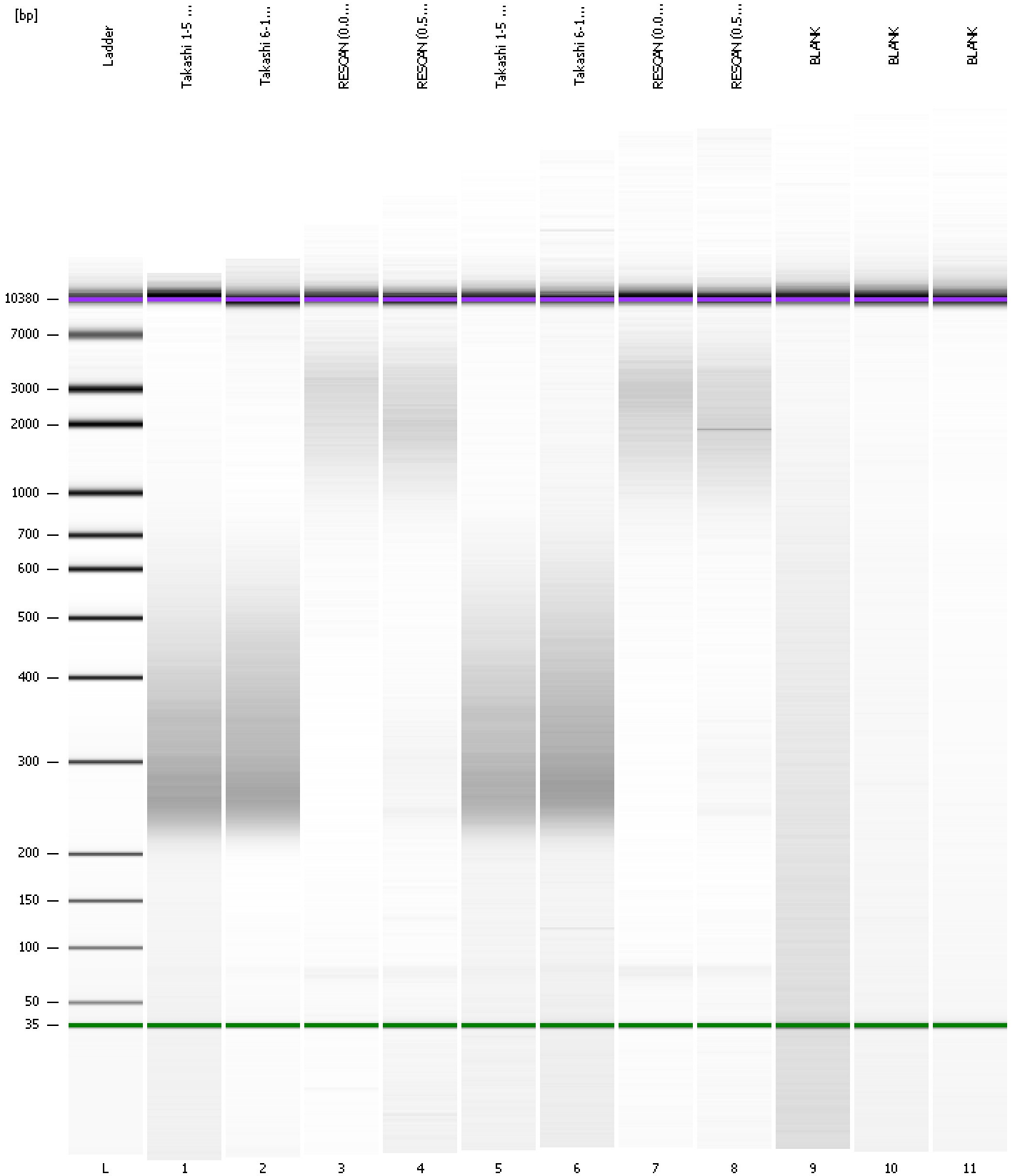
Region table for sample 11 : BLANK

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	0.0	0	0.00	1,000	0.0	0	0.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
Modified: 5/18/2012 12:29:35 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad

Created: 5/18/2012 11:39:28 AM
 Modified: 5/18/2012 12:29:35 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		5/18/2012 12:20:47 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-18\2012-05-18_001.xad)		Instrument	Run		5/18/2012 11:39:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/18/2012 11:39:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/18/2012 11:39:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/18/2012 11:39:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/18/2012 11:39:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/18/2012 11:39:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/18/2012 11:39:34 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1