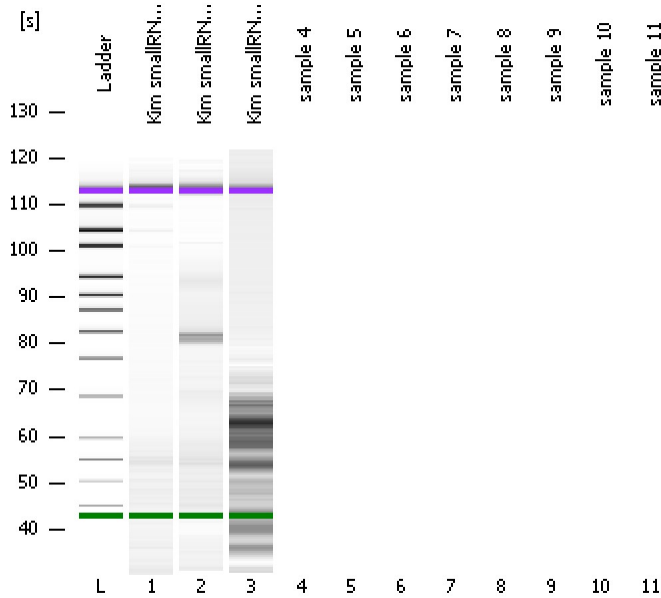


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
Modified: 6/21/2012 4:37:58 PM

Electrophoresis File Run Summary



Instrument Information:

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

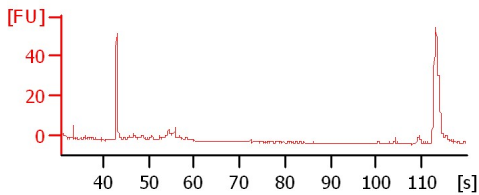
Assay Information:

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

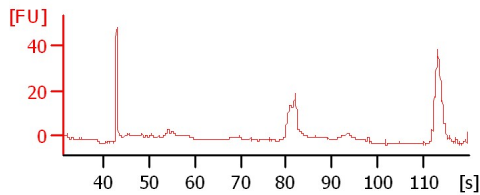
Chip Information:

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

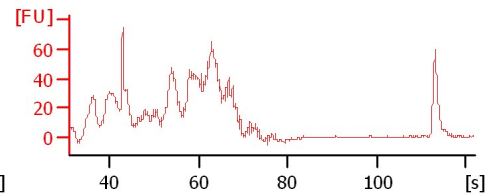
Kim smallRNA caliper 90-120



Kim smallRNA caliper100-120



Kim smallRNA caliper 100-130



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
 Modified: 6/21/2012 4:37:58 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Kim smallRNA caliper 90-120		<input type="checkbox"/>	✓			
Kim smallRNA caliper100-120		<input type="checkbox"/>	✓			
Kim smallRNA caliper 100-130		<input type="checkbox"/>	✓			
sample 4		<input type="checkbox"/>				
sample 5		<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\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
Modified: 6/21/2012 4:37:58 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

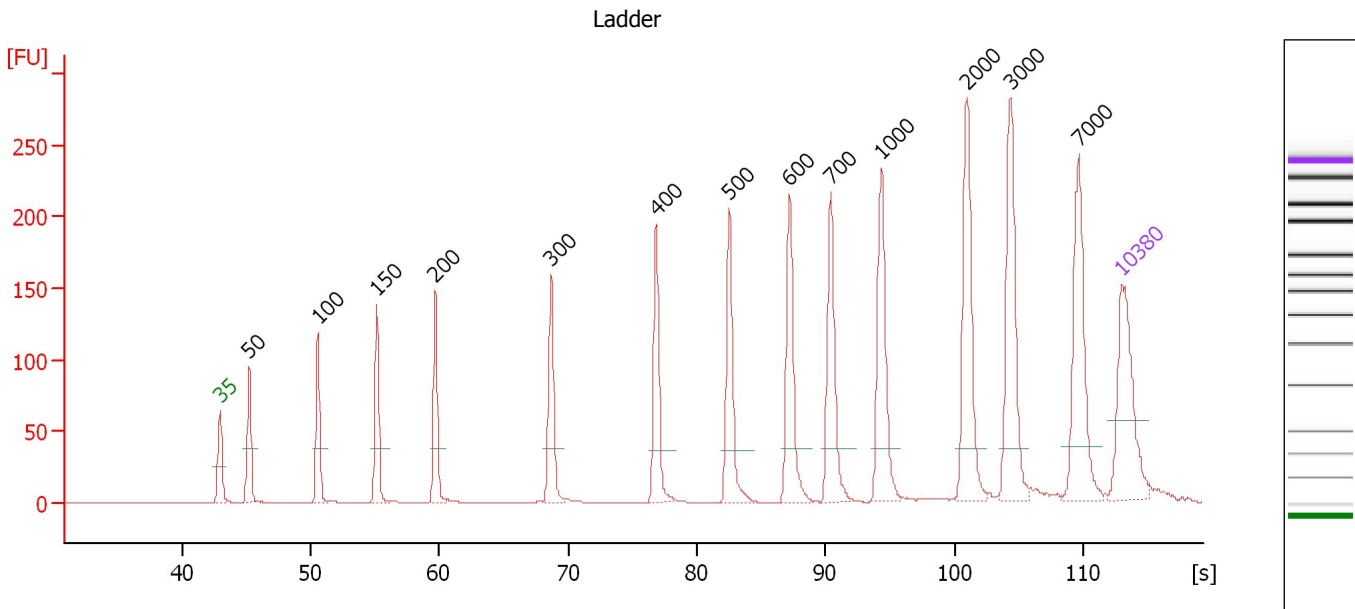
Ladder

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\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
 Modified: 6/21/2012 4:37:58 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

Peak table for Ladder

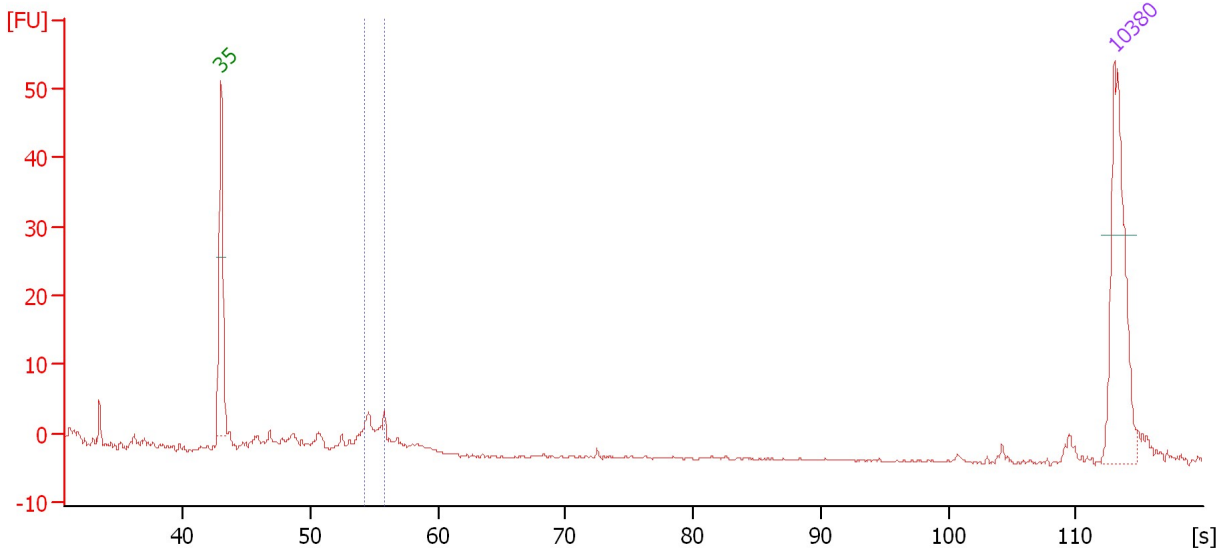
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	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\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
 Modified: 6/21/2012 4:37:58 PM

Electropherogram Summary Continued ...

Kim smallRNA caliper 90-120



Overall Results for sample 1 : Kim smallRNA caliper 90-120

Number of peaks found: 0 Corr. Area 1: 7.3
 Noise: 0.1

Peak table for sample 1 : Kim smallRNA caliper 90-120

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 1 : Kim smallRNA caliper 90-120

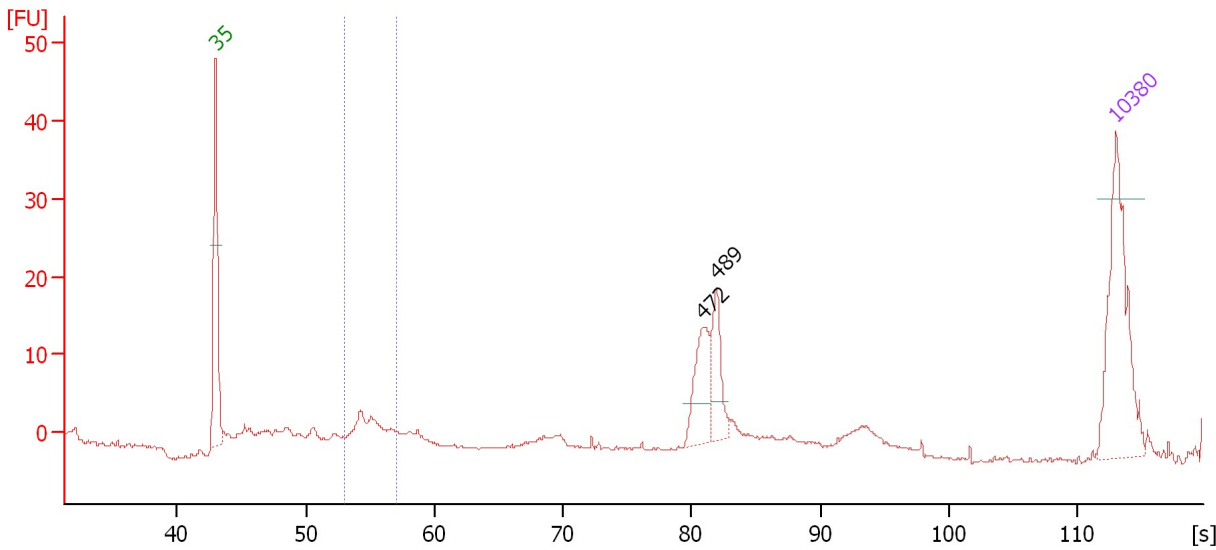
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
54.30	55.88	148	166.3	16.22	7.3	34	3.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
 Modified: 6/21/2012 4:37:58 PM

Electropherogram Summary Continued ...

Kim smallRNA caliper100-120



Overall Results for sample 2 : Kim smallRNA caliper100-120

Number of peaks found: 2 Corr. Area 1: 8.5
 Noise: 0.2

Peak table for sample 2 : Kim smallRNA caliper100-120

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	472	45.09	144.8	
3	489	35.96	111.3	
4	10,380	75.00	10.9	Upper Marker

Region table for sample 2 : Kim smallRNA caliper100-120

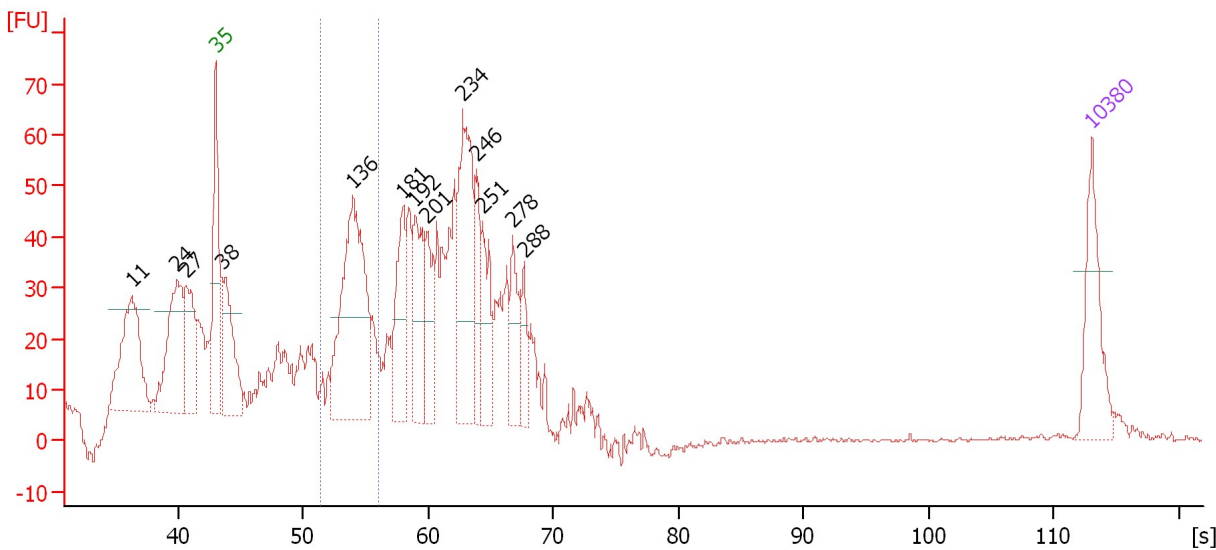
From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area % of Total	Size distribution in CV [%]	Color
53.06	57.09	148	209.4	20.34	8.5	13	6.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
 Modified: 6/21/2012 4:37:58 PM

Electropherogram Summary Continued ...

Kim smallRNA caliper 100-130



Setpoint Deviations for sample 3 : Kim smallRNA caliper 100-130

Height Threshold [FU] : 20

Overall Results for sample 3 : Kim smallRNA caliper 100-130

Number of peaks found: 13 Corr. Area 1: 207.7
 Noise: 0.3

Peak table for sample 3 : Kim smallRNA caliper 100-130

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	11	0.00	0.0	
2	24	0.00	0.0	
3	27	0.00	0.0	
4	35	125.00	5,411.3	Lower Marker
5	38	173.74	6,849.6	
6	136	414.31	4,611.5	
7	181	138.91	1,163.7	
8	192	137.50	1,086.7	
9	201	88.81	668.9	
10	234	240.66	1,561.1	
11	246	78.72	484.9	
12	251	88.71	535.0	
13	278	72.47	395.1	
14	288	49.02	258.0	
15	10,380	75.00	10.9	Upper Marker

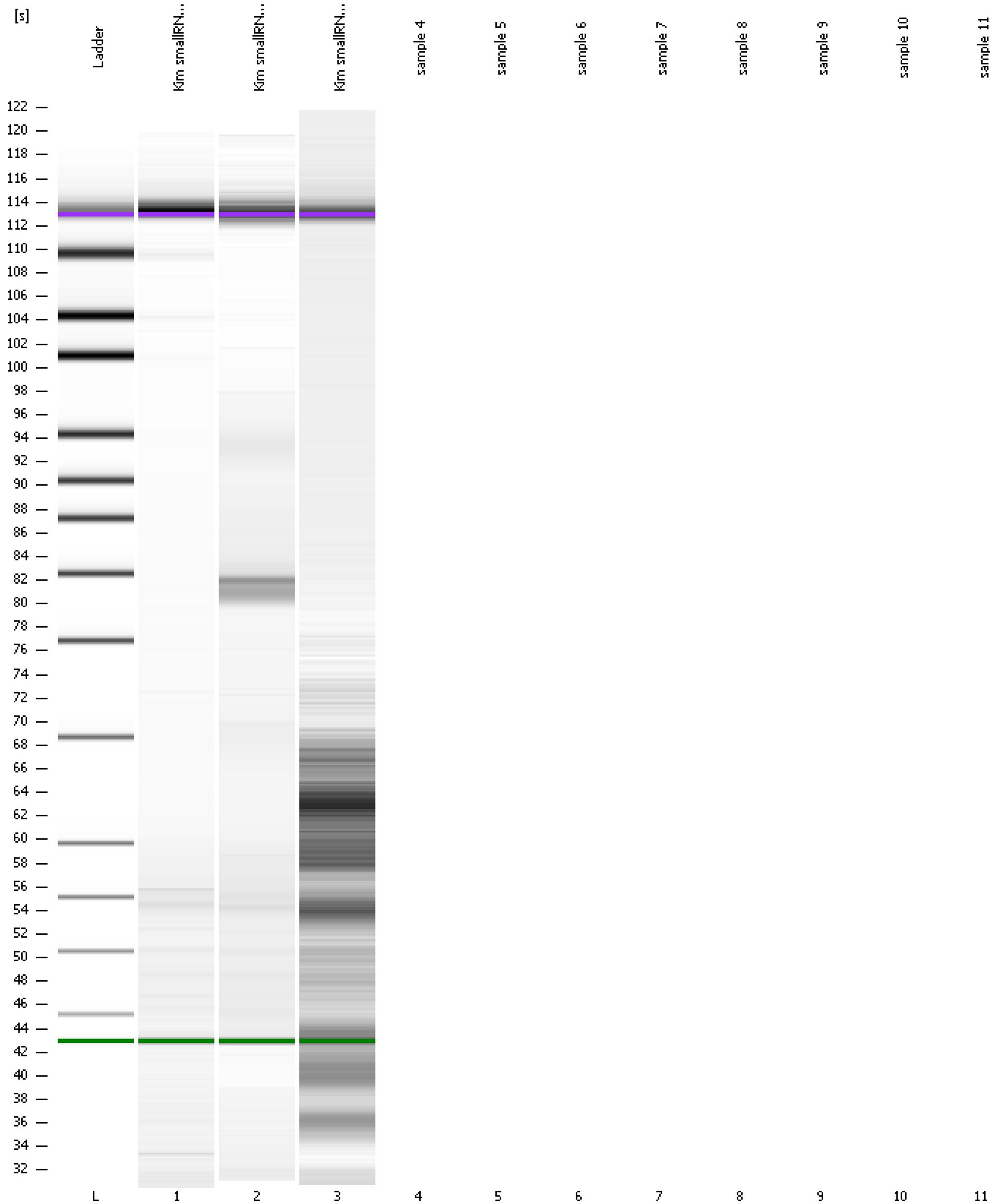
Region table for sample 3 : Kim smallRNA caliper 100-130

From [s]	To [s]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
51.29	55.96	137	5,143.6	463.62	207.7	14	8.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
Modified: 6/21/2012 4:37:58 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
Modified: 6/21/2012 4:37:58 PM

Invalid Samples

Sample 4 has not been run, no results available.

Sample 5 has not been run, no results available.

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\2012-06-21\2012-06-21_005.xad

Created: 6/21/2012 4:17:44 PM
 Modified: 6/21/2012 4:37:58 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 4)		Instrument	Run		6/21/2012 4:36:13 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-21\2012-06-21_005.xad)		Instrument	Run		6/21/2012 4:17:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/21/2012 4:17:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/21/2012 4:17:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/21/2012 4:17:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/21/2012 4:17:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/21/2012 4:17:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/21/2012 4:17:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1