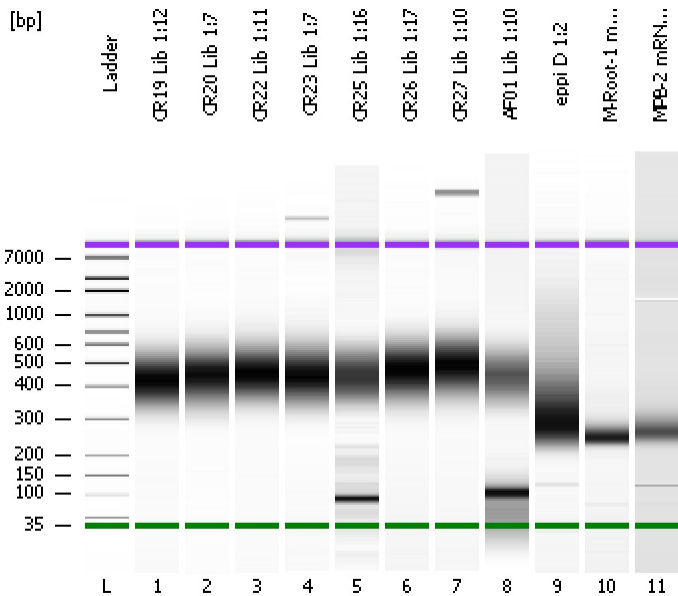


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
Modified: 6/26/2013 10:46:51 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

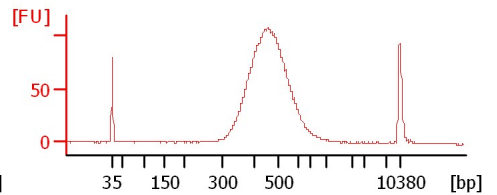
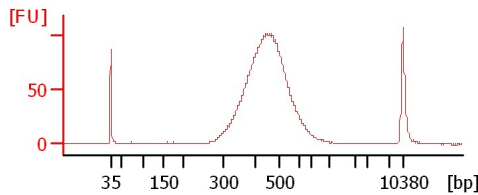
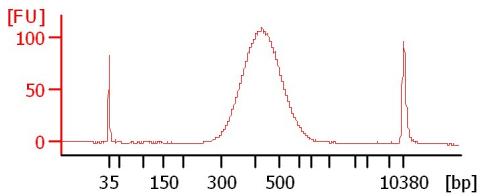
Chip Information:

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

CR19 Lib 1:12

CR20 Lib 1:7

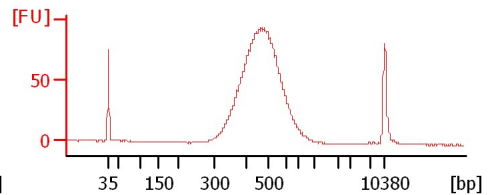
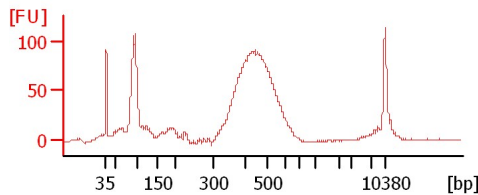
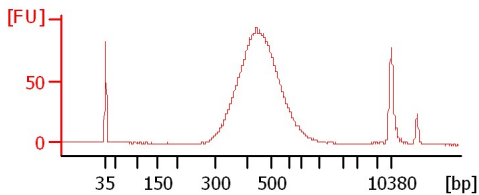
CR22 Lib 1:11



CR23 Lib 1:7

CR25 Lib 1:16

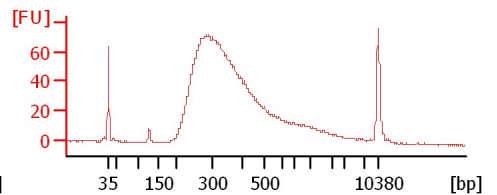
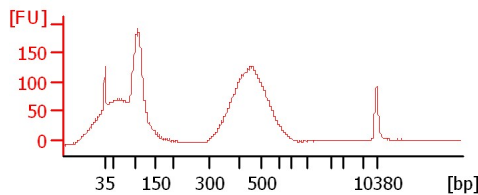
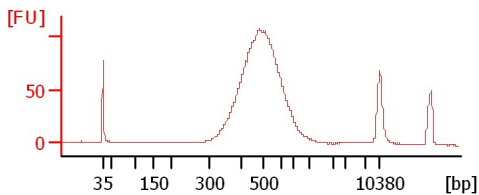
CR26 Lib 1:17



CR27 Lib 1:10

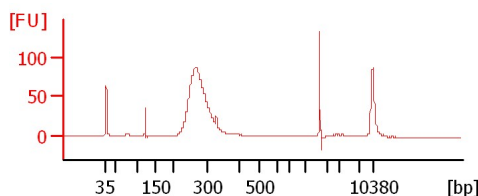
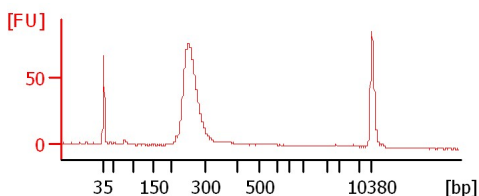
AF01 Lib 1:10

eppi D 1:2



M-Root-1 mRNA Lib

MPB-2 mRNA Lib



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CR19 Lib 1:12		<input type="checkbox"/>	✓			
CR20 Lib 1:7		<input type="checkbox"/>	✓			
CR22 Lib 1:11		<input type="checkbox"/>	✓			
CR23 Lib 1:7		<input type="checkbox"/>	✓			
CR25 Lib 1:16		<input type="checkbox"/>	✓			
CR26 Lib 1:17		<input type="checkbox"/>	✓			
CR27 Lib 1:10		<input type="checkbox"/>	✓			
AF01 Lib 1:10		<input type="checkbox"/>	✓			
eppi D 1:2		<input type="checkbox"/>	✓			
M-Root-1 mRNA Lib		<input type="checkbox"/>	✓			
MPB-2 mRNA Lib		<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\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
Modified: 6/26/2013 10:46:51 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

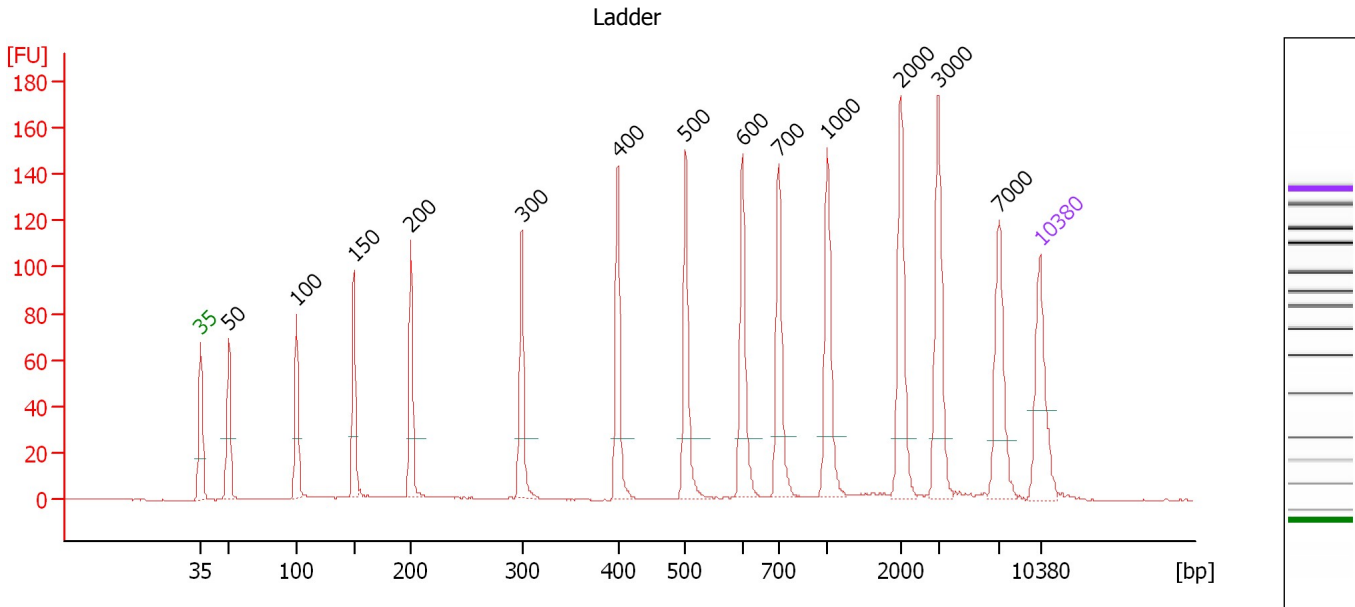
Ladder

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\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

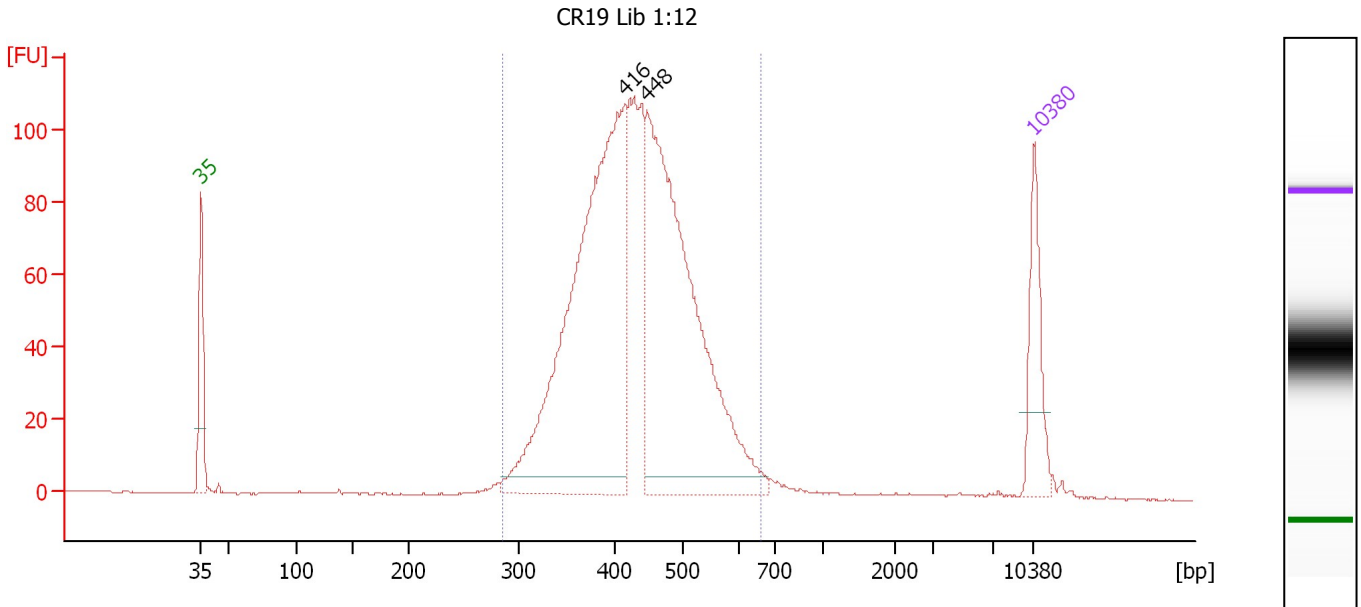
Peak table for Ladder

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\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : CR19 Lib 1:12

Number of peaks found: 2 Corr. Area 1: 1,574.3
 Noise: 0.2

Peak table for sample 1 : CR19 Lib 1:12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	416	796.69	2,902.8	
3	448	701.67	2,371.1	
4	10,380	75.00	10.9	Upper Marker

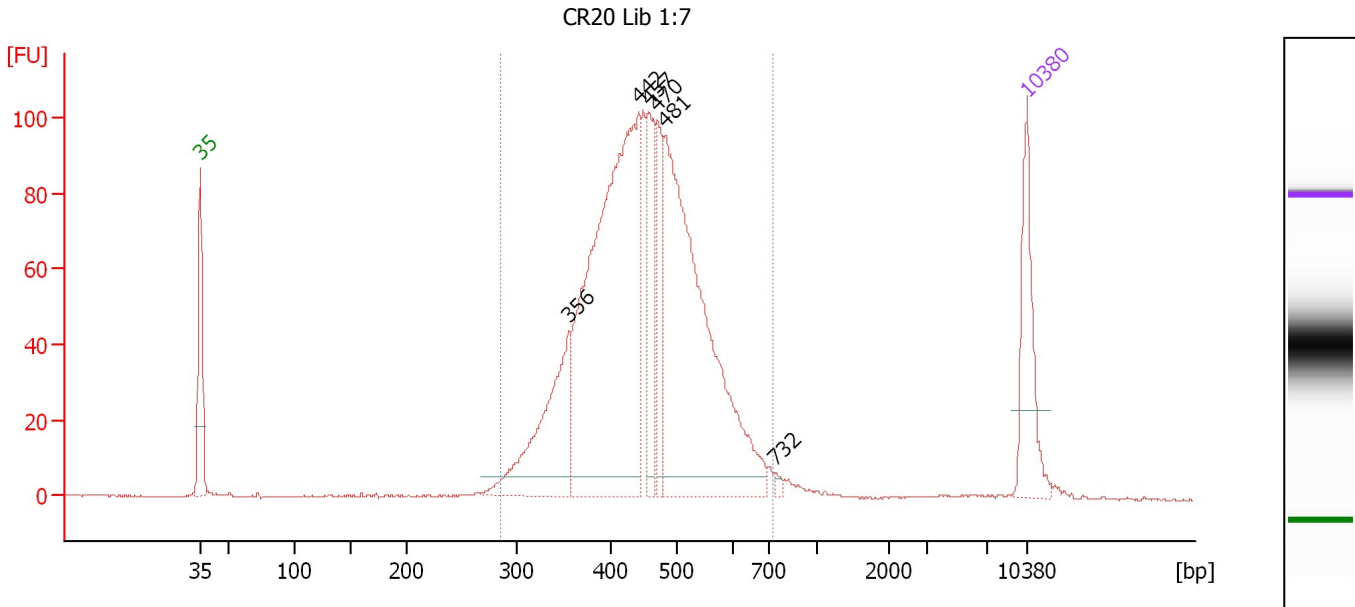
Region table for sample 1 : CR19 Lib 1:12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
285	664	435	6,401.2	1,776.61	1,574.3	97	16.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : CR20 Lib 1:7

Number of peaks found: 6 Corr. Area 1: 1,499.7
 Noise: 0.2

Peak table for sample 2 : CR20 Lib 1:7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	356	184.04	783.4	
3	442	610.79	2,092.3	
4	457	109.01	361.7	
5	470	75.59	243.9	
6	481	506.31	1,593.2	
7	732	4.49	9.3	
8	10,380	75.00	10.9	Upper Marker

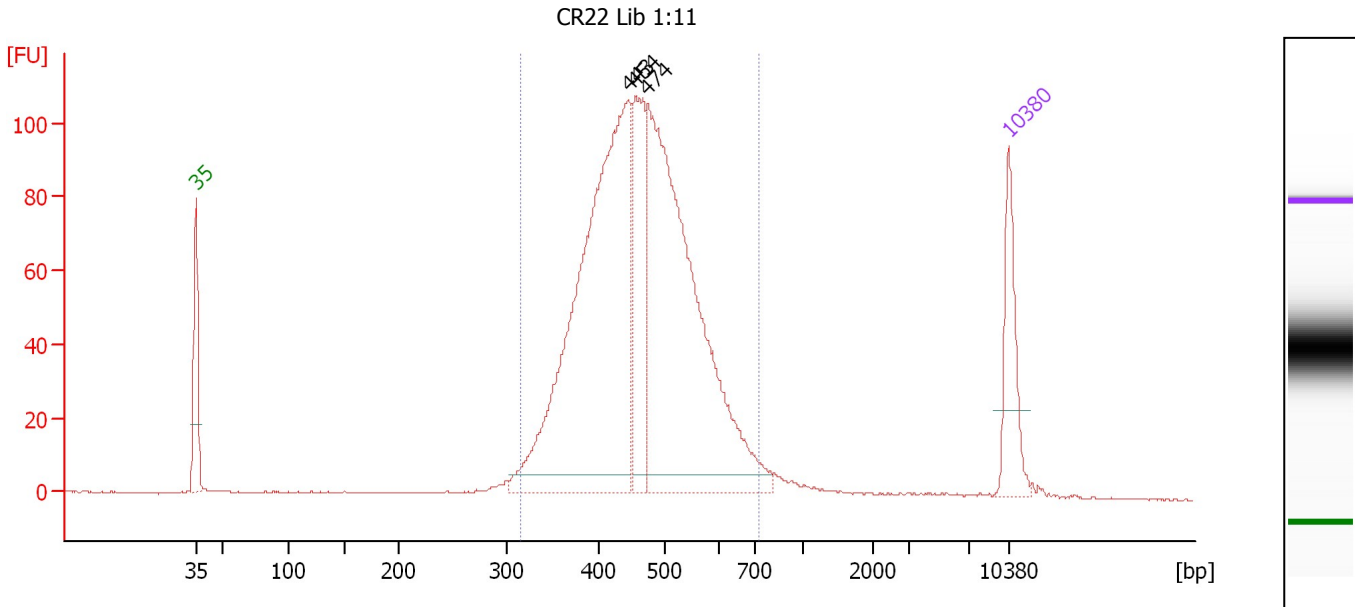
Region table for sample 2 : CR20 Lib 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
285	716	452	5,509.4	1,578.81	1,499.7	96	17.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : CR22 Lib 1:11

Number of peaks found: 3 Corr. Area 1: 1,513.1
 Noise: 0.2

Peak table for sample 3 : CR22 Lib 1:11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	443	801.11	2,737.4	
3	454	187.00	624.1	
4	474	739.70	2,366.9	
5	10,380	75.00	10.9	Upper Marker

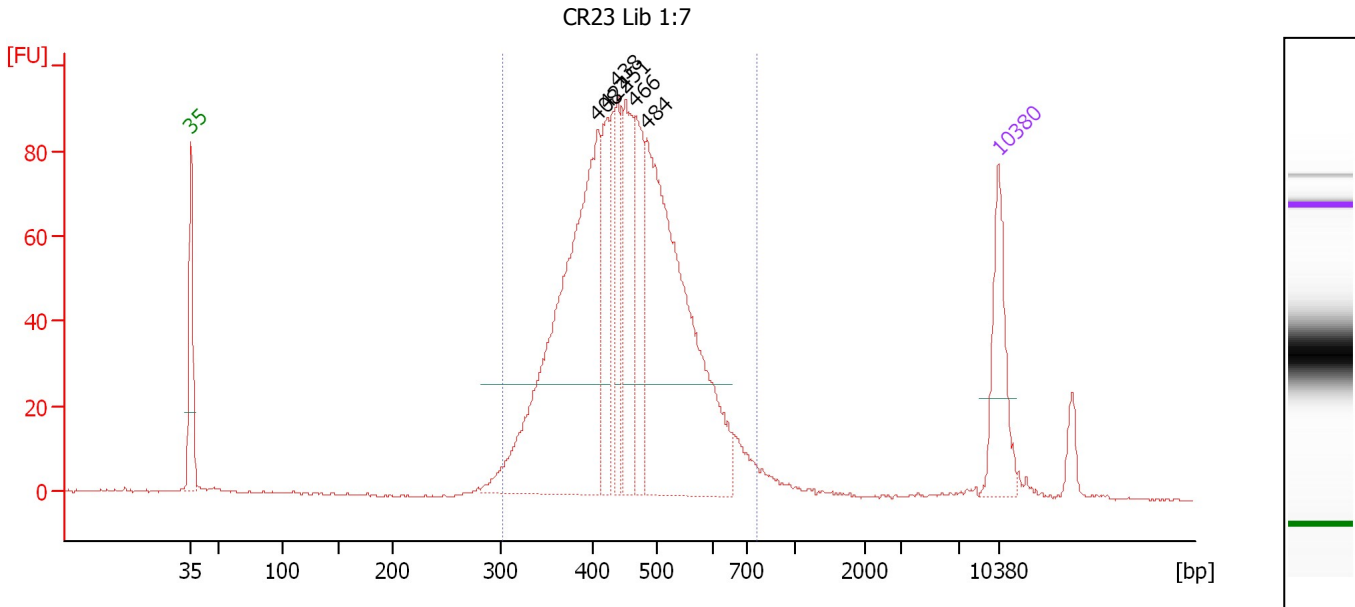
Region table for sample 3 : CR22 Lib 1:11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
314	724	465	5,892.9	1,745.83	1,513.1	94	16.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : CR23 Lib 1:7

Height Threshold [FU] : 26

Overall Results for sample 4 : CR23 Lib 1:7

Number of peaks found: 6 Corr. Area 1: 1,378.5
 Noise: 0.2

Peak table for sample 4 : CR23 Lib 1:7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	408	560.18	2,080.1	
3	422	98.70	354.4	
4	438	82.93	286.7	
5	451	136.95	460.5	
6	466	118.07	383.8	
7	484	511.40	1,600.4	
8	10,380	75.00	10.9	Upper Marker

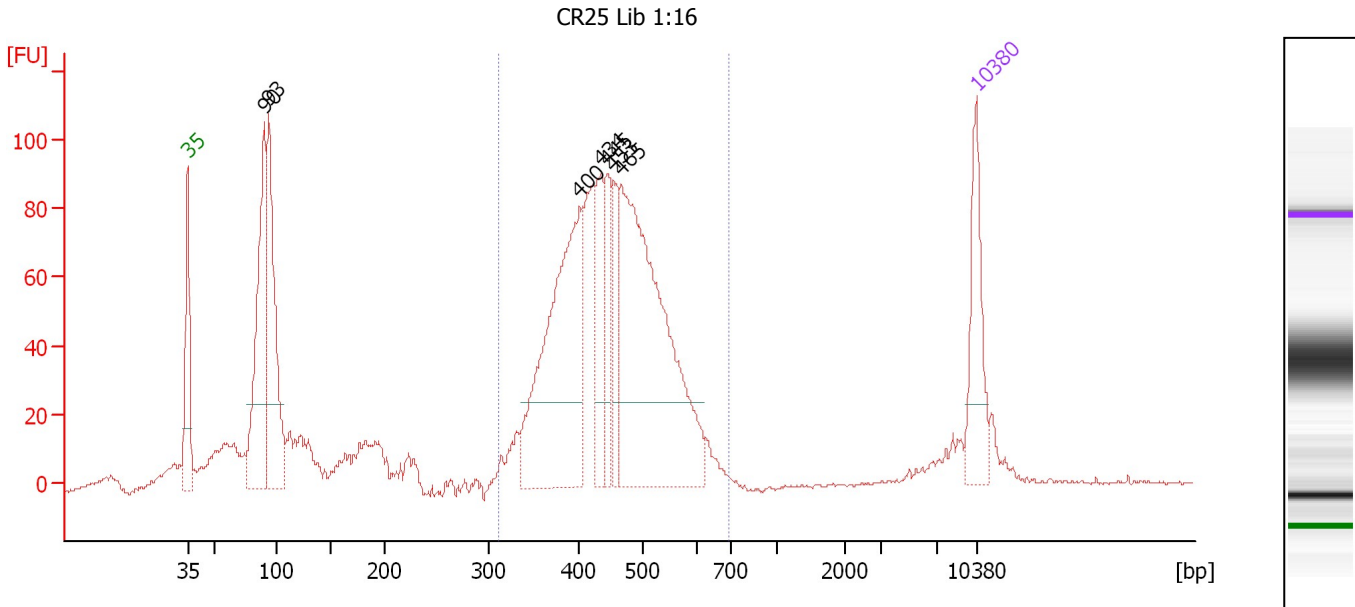
Region table for sample 4 : CR23 Lib 1:7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
302	758	458	5,542.3	1,609.43	1,378.5	94	17.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : CR25 Lib 1:16

Height Threshold [FU] : 25

Overall Results for sample 5 : CR25 Lib 1:16

Number of peaks found: 7 Corr. Area 1: 1,275.5
 Noise: 0.7

Peak table for sample 5 : CR25 Lib 1:16

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	90	280.07	4,722.3	
3	93	261.01	4,242.7	
4	400	352.00	1,332.8	
5	434	92.19	322.1	
6	445	66.37	226.2	
7	453	64.74	216.6	
8	465	473.32	1,543.3	
9	10,380	75.00	10.9	Upper Marker

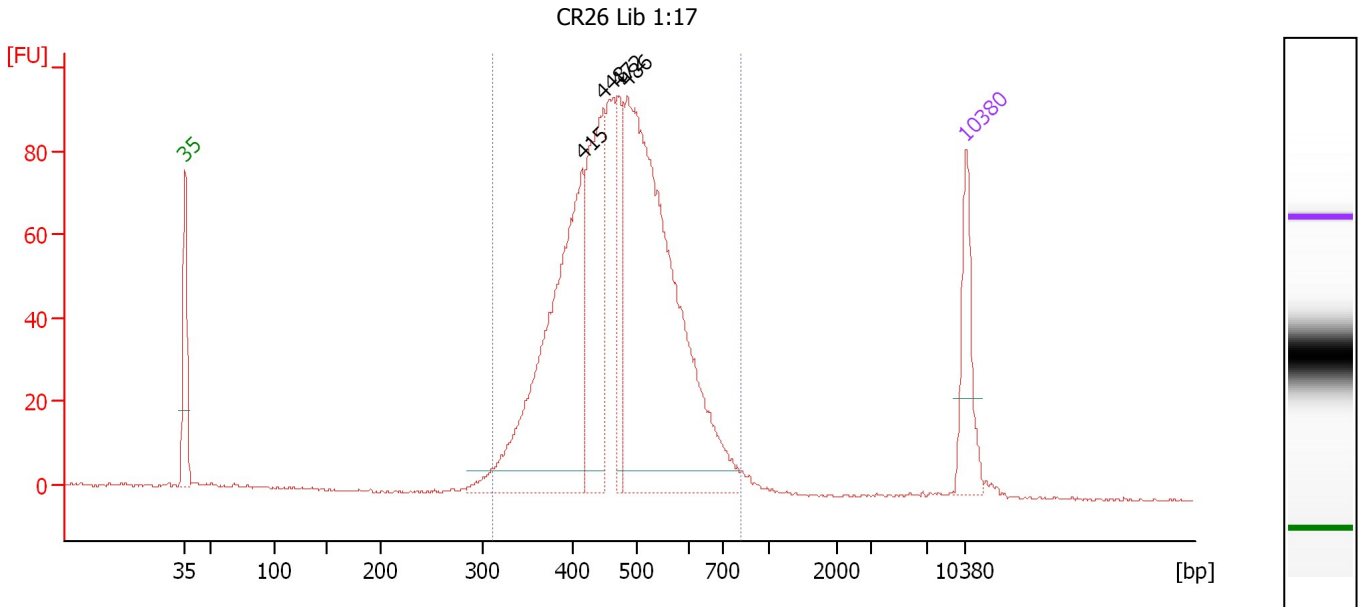
Region table for sample 5 : CR25 Lib 1:16

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
310	694	452	4,154.4	1,200.49	1,275.5	61	15.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : CR26 Lib 1:17

Number of peaks found: 4 Corr. Area 1: 1,372.5
 Noise: 0.3

Peak table for sample 6 : CR26 Lib 1:17

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	415	527.32	1,927.5	
3	448	265.87	898.5	
4	472	105.88	339.9	
5	486	807.61	2,520.0	
6	10,380	75.00	10.9	Upper Marker

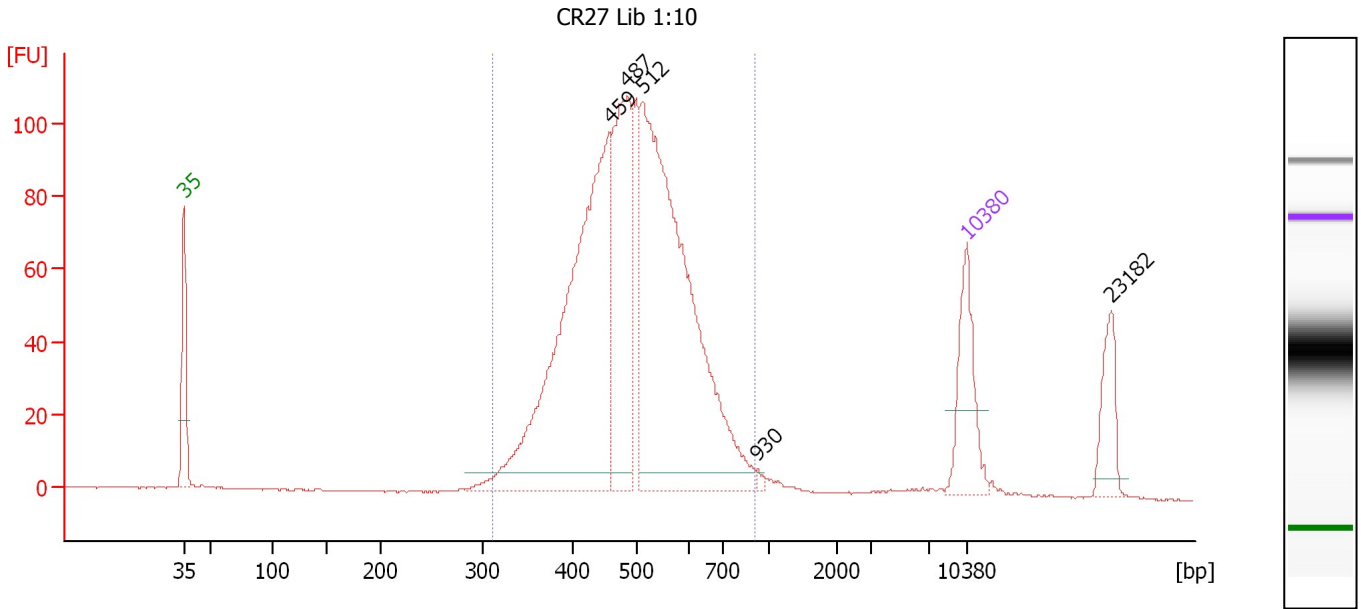
Region table for sample 6 : CR26 Lib 1:17

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
311	815	477	6,068.0	1,835.79	1,372.5	97	17.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : CR27 Lib 1:10

Number of peaks found: 5 Corr. Area 1: 1,565.4
 Noise: 0.2

Peak table for sample 7 : CR27 Lib 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	459	635.55	2,098.8	
3	487	270.84	843.2	
4	512	691.38	2,044.5	
5	930	3.98	6.5	
6	10,380	75.00	10.9	Upper Marker
7	23,182	0.00	0.0	

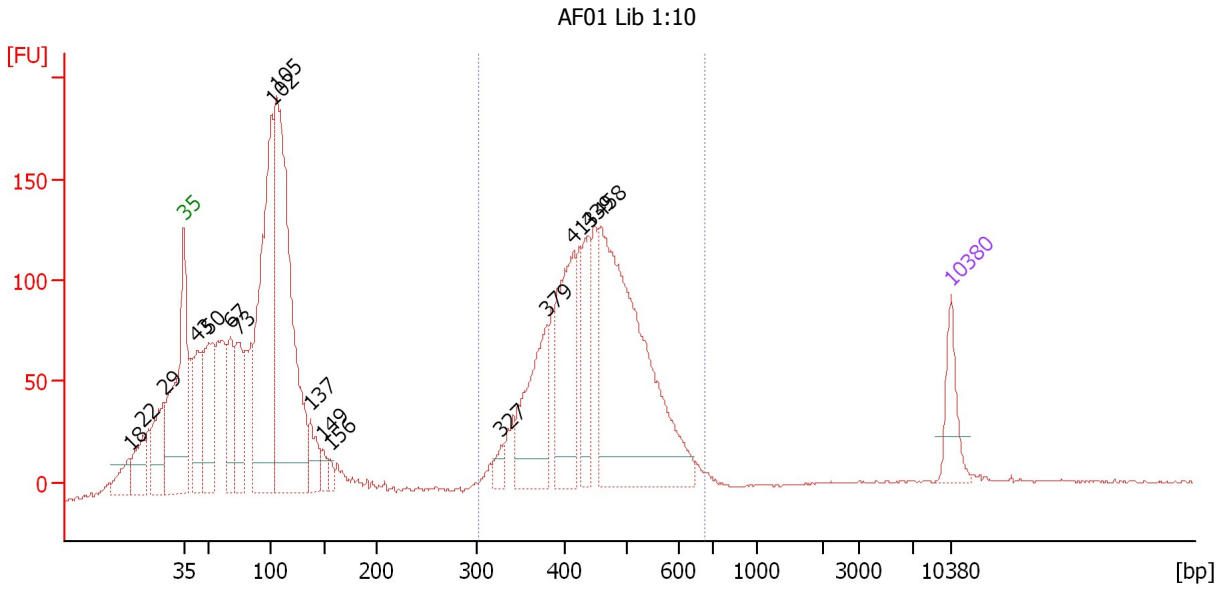
Region table for sample 7 : CR27 Lib 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
311	916	501	5,360.8	1,693.05	1,565.4	93	19.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : AF01 Lib 1:10

Height Threshold [FU] : 15

Overall Results for sample 8 : AF01 Lib 1:10

Number of peaks found: 17 Corr. Area 1: 1,772.5
 Noise: 0.4

Peak table for sample 8 : AF01 Lib 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	18	0.00	0.0	
2	22	0.00	0.0	
3	29	0.00	0.0	
4	35	125.00	5,411.3	Lower Marker
5	43	247.29	8,736.1	
6	50	323.63	9,768.4	
7	67	186.27	4,185.9	
8	73	230.25	4,749.5	
9	102	860.13	12,814.7	
10	105	1,166.15	16,788.8	
11	137	96.05	1,061.2	
12	149	38.47	391.7	
13	156	25.91	250.9	
14	327	32.85	152.2	
15	379	274.52	1,096.4	
16	413	324.20	1,189.4	
17	439	157.88	545.1	
18	458	887.44	2,937.3	
19	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...

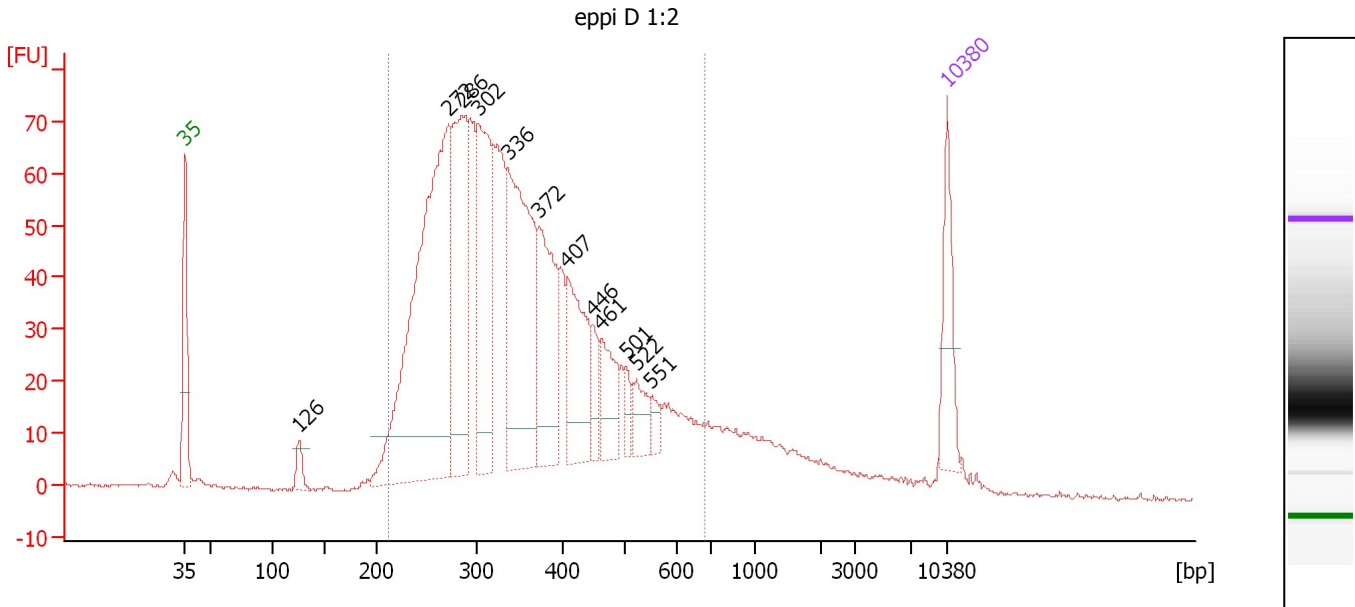
... Region table for sample 8 : AF01 Lib 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
302	675	450	7,183.7	2,067.05	1,772.5	38	16.0	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : eppi D 1:2

Height Threshold [FU] : 8

Overall Results for sample 9 : eppi D 1:2

Number of peaks found: 12 Corr. Area 1: 1,627.4
 Noise: 0.3

Peak table for sample 9 : eppi D 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	29.32	352.0	
3	272	785.33	4,374.7	
4	286	316.90	1,680.3	
5	302	272.55	1,367.9	
6	336	393.66	1,774.5	
7	372	209.32	853.5	
8	407	164.57	613.4	
9	446	40.83	138.6	
10	461	79.69	261.8	
11	501	21.72	65.7	
12	522	43.14	125.2	
13	551	19.82	54.5	
14	10,380	75.00	10.9	Upper Marker

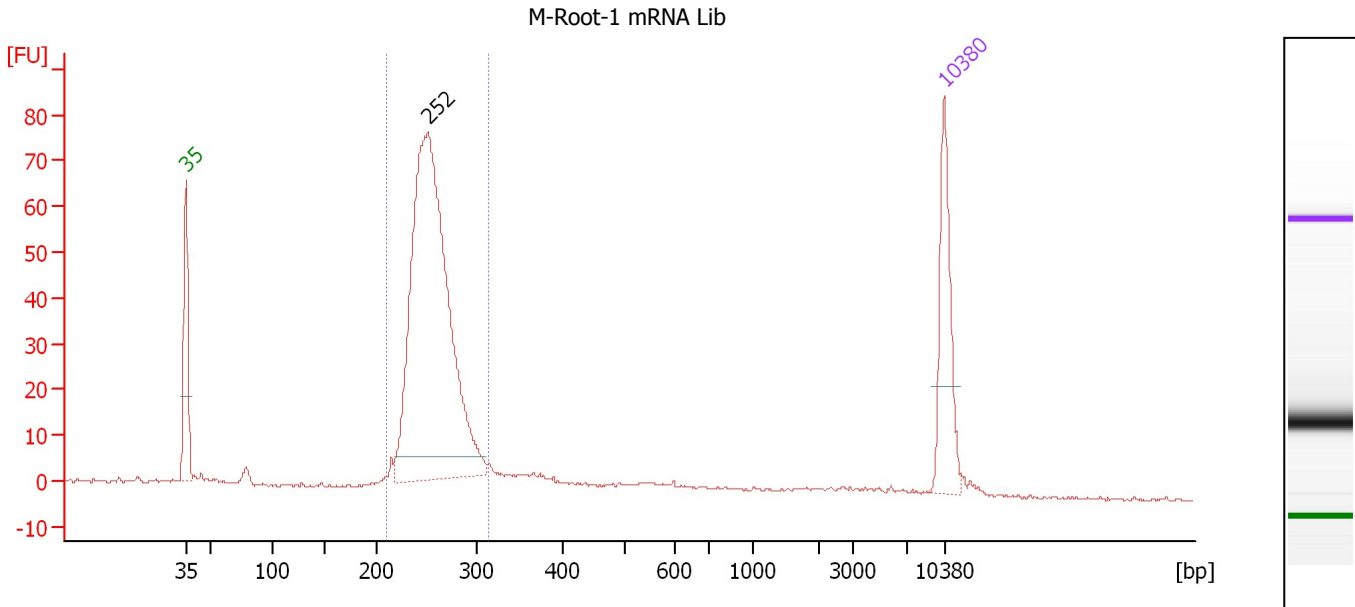
Region table for sample 9 : eppi D 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
212	687	357	14,948.3	3,193.26	1,627.4	89	28.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : M-Root-1 mRNA Lib

Number of peaks found: 1 Corr. Area 1: 493.3
 Noise: 0.3

Peak table for sample 10 : M-Root-1 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	252	665.13	3,996.3	
3	10,380	75.00	10.9	Upper Marker

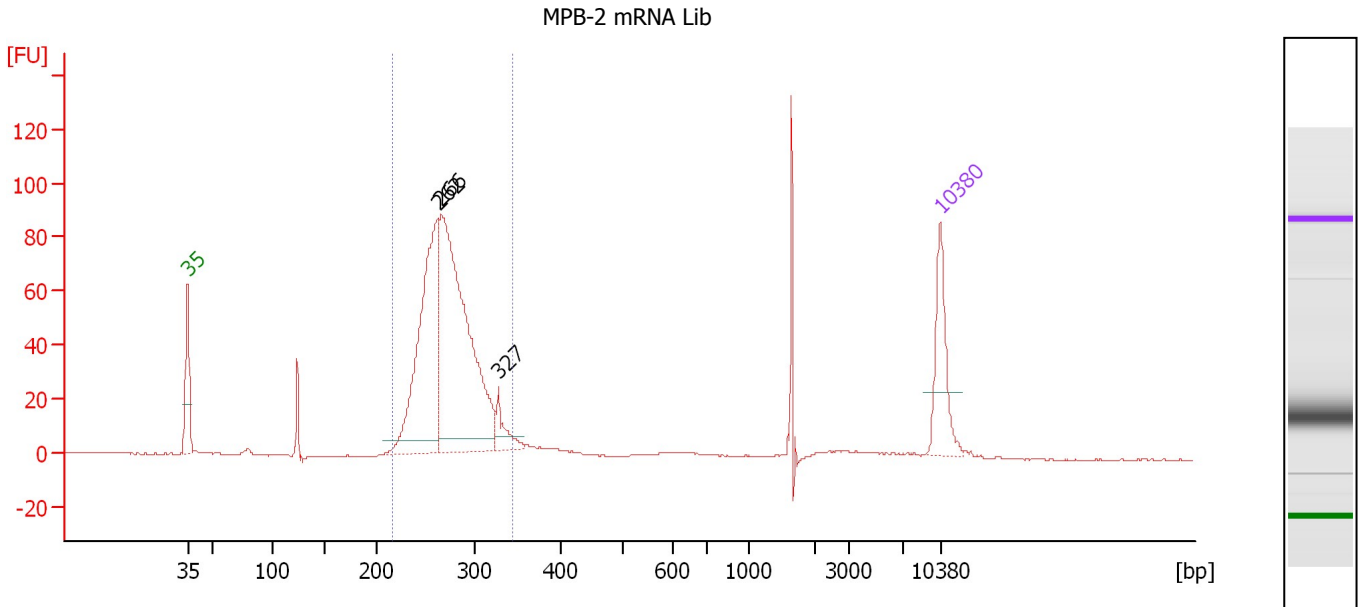
Region table for sample 10 : M-Root-1 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
211	314	257	4,155.5	703.38	493.3	81	7.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : MPB-2 mRNA Lib

Number of peaks found: 3 Corr. Area 1: 694.9
 Noise: 0.1

Peak table for sample 11 : MPB-2 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	373.70	2,161.7	
3	266	574.30	3,275.2	
4	327	37.77	175.2	
5	10,380	75.00	10.9	Upper Marker

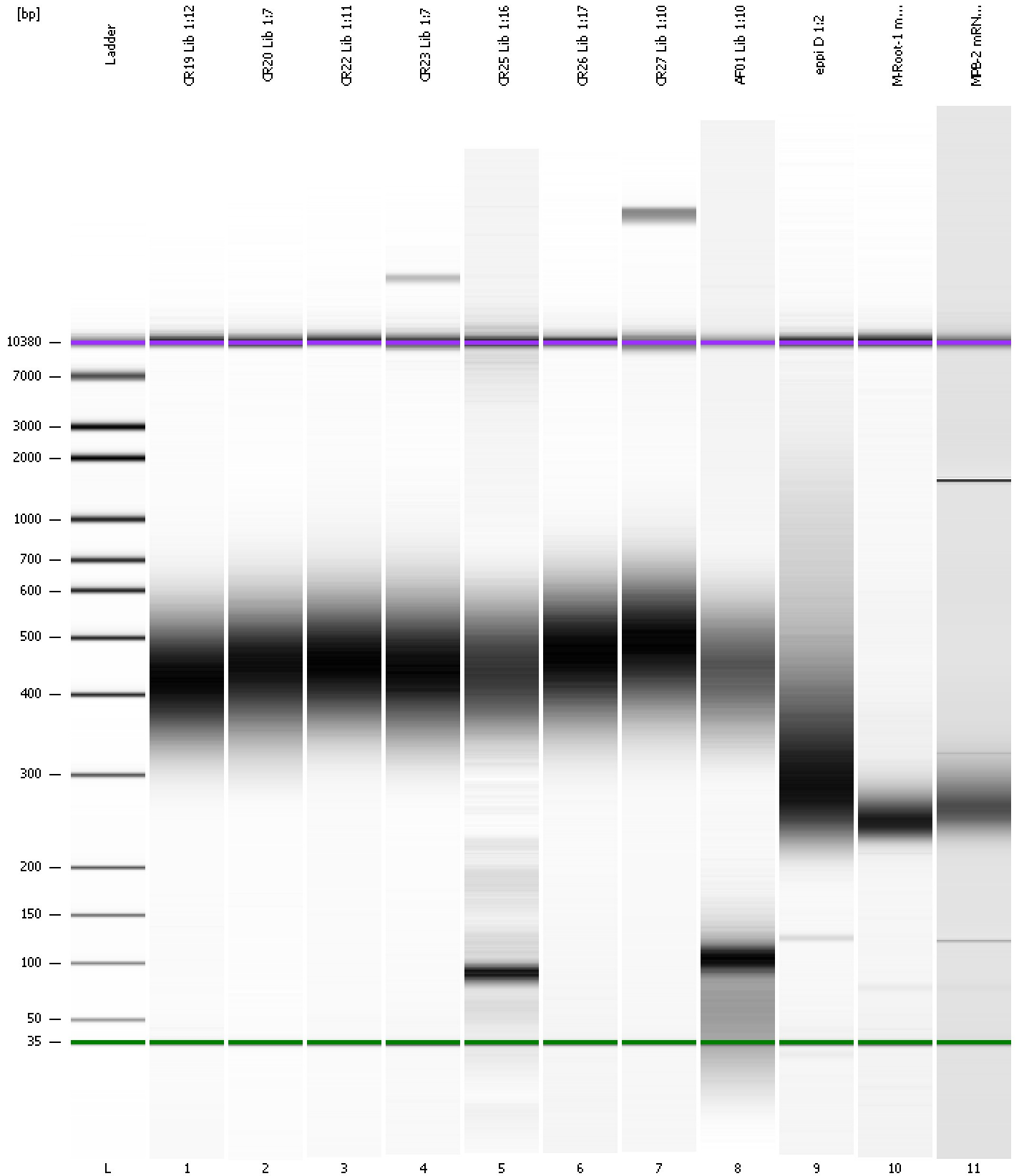
Region table for sample 11 : MPB-2 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
217	343	273	5,570.8	998.11	694.9	85	9.0	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
Modified: 6/26/2013 10:46:51 AM

Gel Image

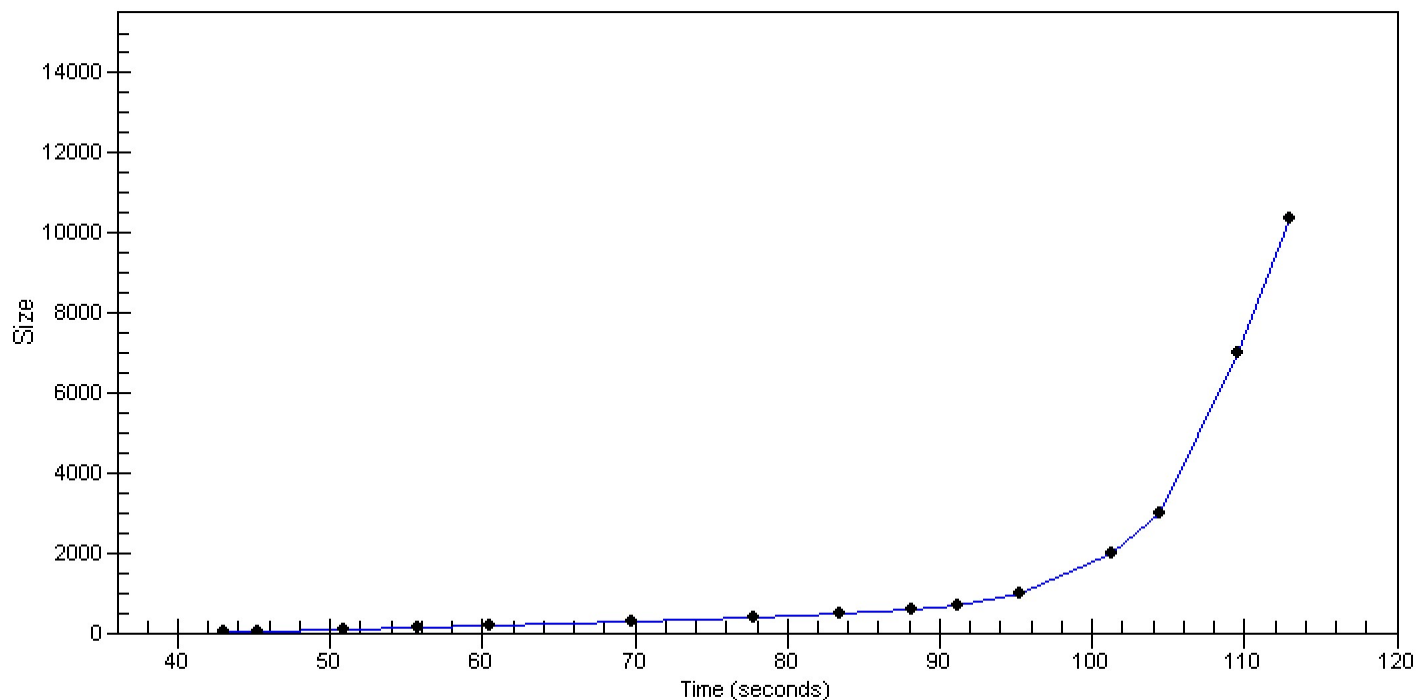


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
Modified: 6/26/2013 10:46:51 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad

Created: 6/26/2013 10:00:14 AM
 Modified: 6/26/2013 10:46:51 AM

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		6/26/2013 10:41:33 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-06-26\2013-06-26_002.xad)		Instrument	Run		6/26/2013 10:00:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/26/2013 10:00:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/26/2013 10:00:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/26/2013 10:00:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/26/2013 10:00:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/26/2013 10:00:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/26/2013 10:00:20 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1