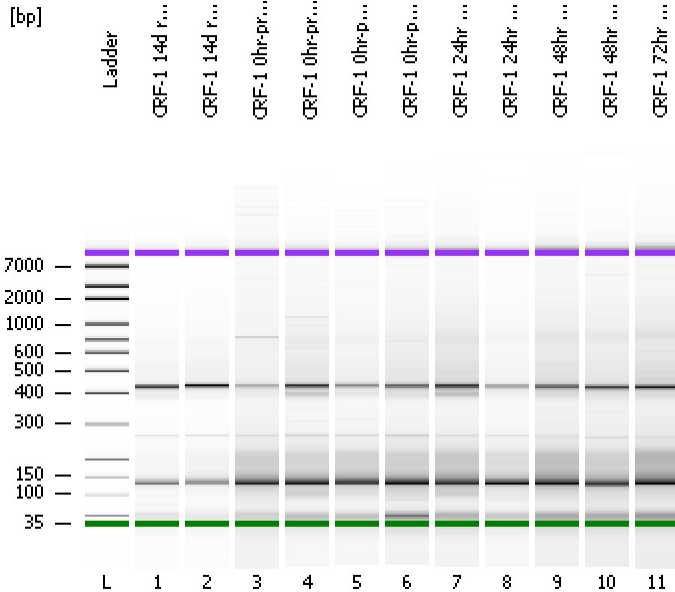


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
Modified: 3/29/2012 2:52:31 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

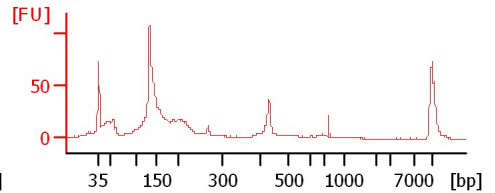
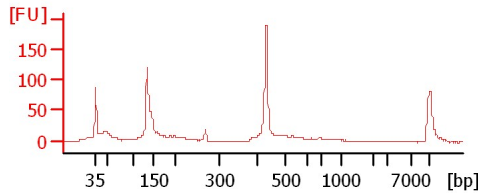
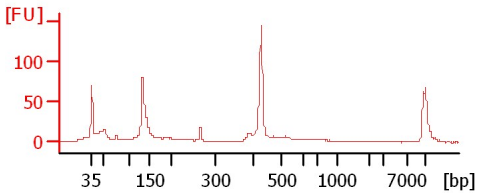
Chip Information:

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

CRF-1 14d root exp 1

CRF-1 14d root exp 2

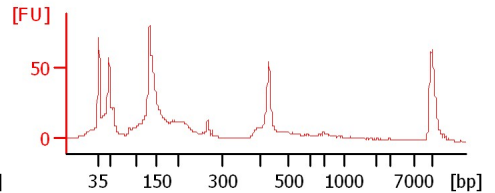
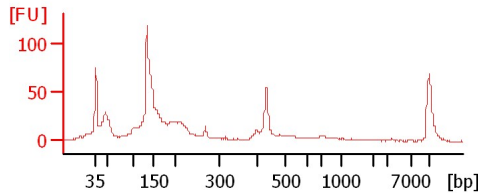
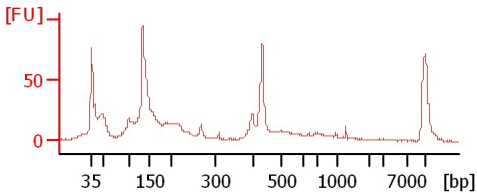
CRF-1 0hr-pre med cont



CRF-1 0hr-pre med exp

CRF-1 0hr-post med exp1

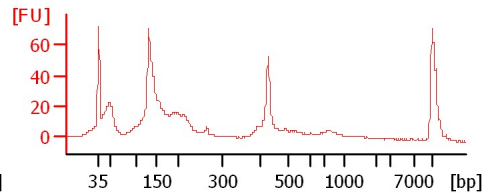
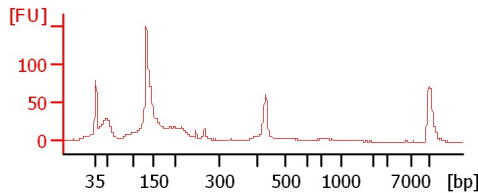
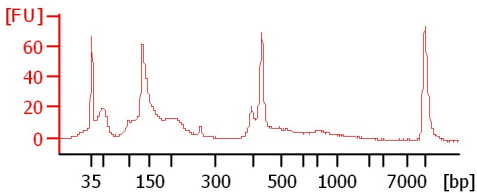
CRF-1 0hr-post med exp2



CRF-1 24hr med cont

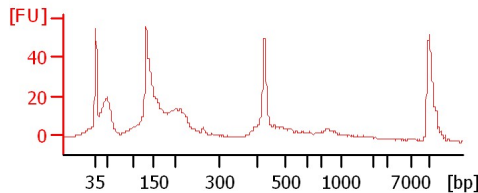
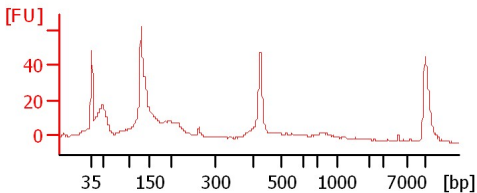
CRF-1 24hr med exp

CRF-1 48hr med cont



CRF-1 48hr med exp

CRF-1 72hr med cont



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CRF-1 14d root exp 1		<input type="checkbox"/>	✓			
CRF-1 14d root exp 2		<input type="checkbox"/>	✓			
CRF-1 0hr-pre med cont		<input type="checkbox"/>	✓			
CRF-1 0hr-pre med exp		<input type="checkbox"/>	✓			
CRF-1 0hr-post med exp1		<input type="checkbox"/>	✓			
CRF-1 0hr-post med exp2		<input type="checkbox"/>	✓			
CRF-1 24hr med cont		<input type="checkbox"/>	✓			
CRF-1 24hr med exp		<input type="checkbox"/>	✓			
CRF-1 48hr med cont		<input type="checkbox"/>	✓			
CRF-1 48hr med exp		<input type="checkbox"/>	✓			
CRF-1 72hr med cont		<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\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
Modified: 3/29/2012 2:52:31 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] : 20
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

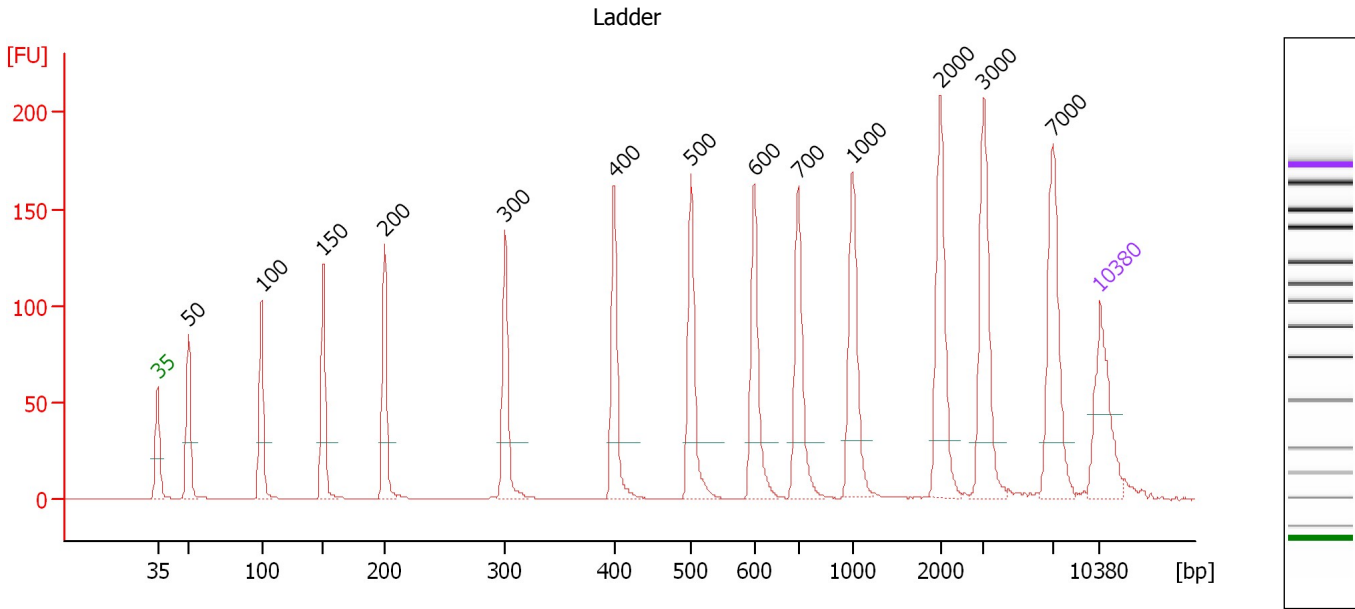
Ladder

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\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

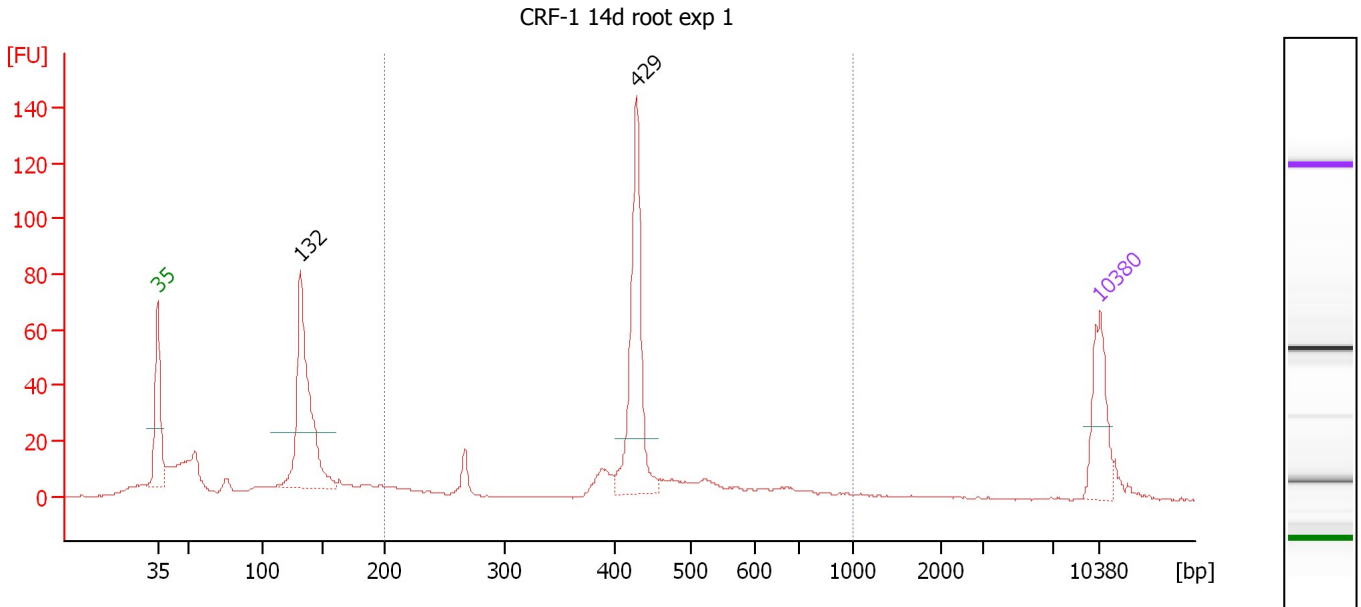
Peak table for Ladder

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\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : CRF-1 14d root exp 1

Number of peaks found: 2 Corr. Area 1: 309.6
 Noise: 0.2

Peak table for sample 1 : CRF-1 14d root exp 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	132	336.54	3,869.0	
3	429	243.96	862.5	
4	10,380	75.00	10.9	Upper Marker

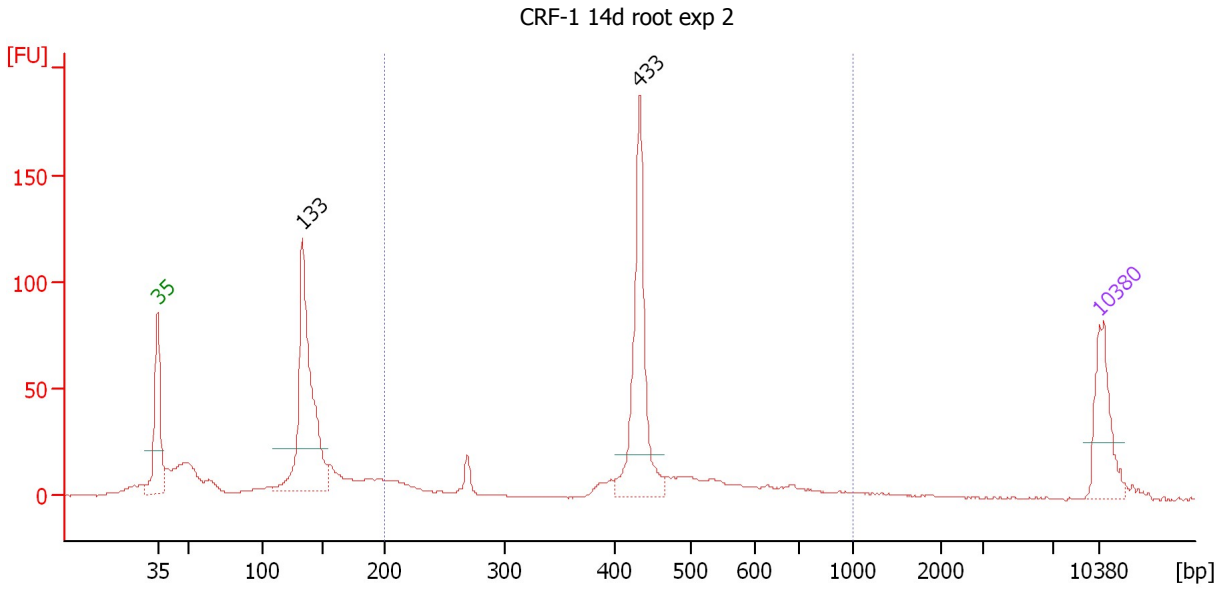
Region table for sample 1 : CRF-1 14d root exp 1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,728.9	446	455.70	1,000	309.6	45	26.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : CRF-1 14d root exp 2

Number of peaks found: 2 Corr. Area 1: 411.1
 Noise: 0.3

Peak table for sample 2 : CRF-1 14d root exp 2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	373.40	4,238.8	
3	433	244.52	856.0	
4	10,380	75.00	10.9	Upper Marker

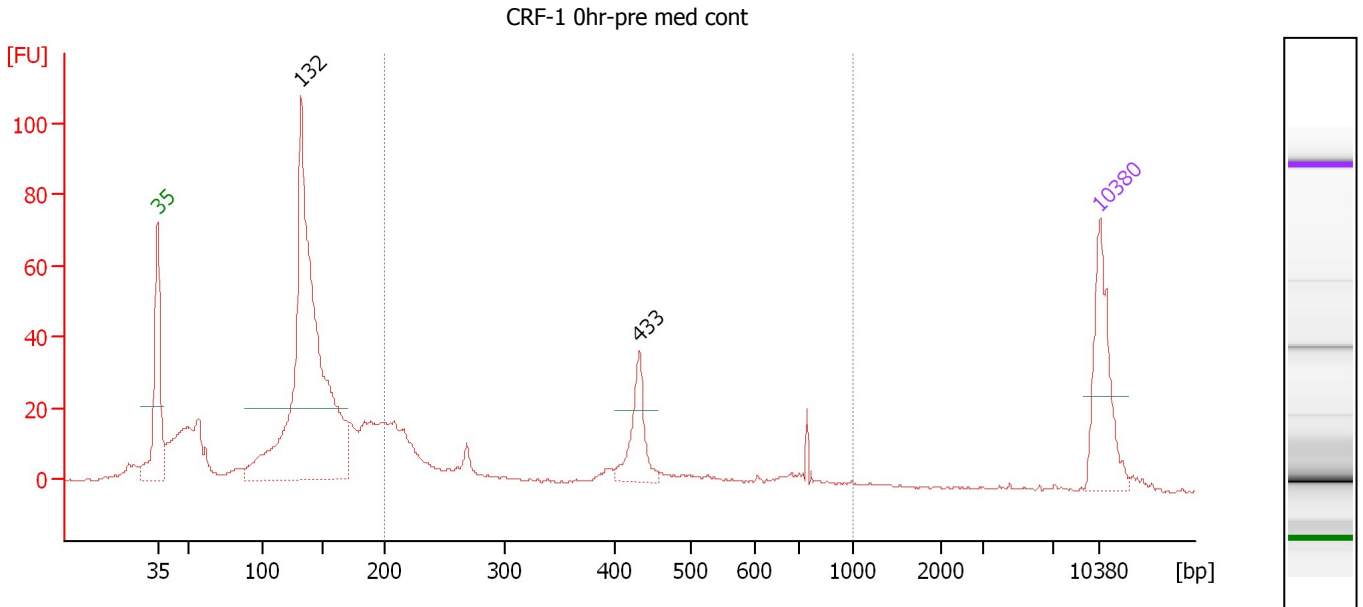
Region table for sample 2 : CRF-1 14d root exp 2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,704.6	453	447.36	1,000	411.1	44	28.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : CRF-1 0hr-pre med cont

Number of peaks found: 2 Corr. Area 1: 235.2
 Noise: 0.3

Peak table for sample 3 : CRF-1 0hr-pre med cont

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	132	653.53	7,482.1	
3	433	60.69	212.5	
4	10,380	75.00	10.9	Upper Marker

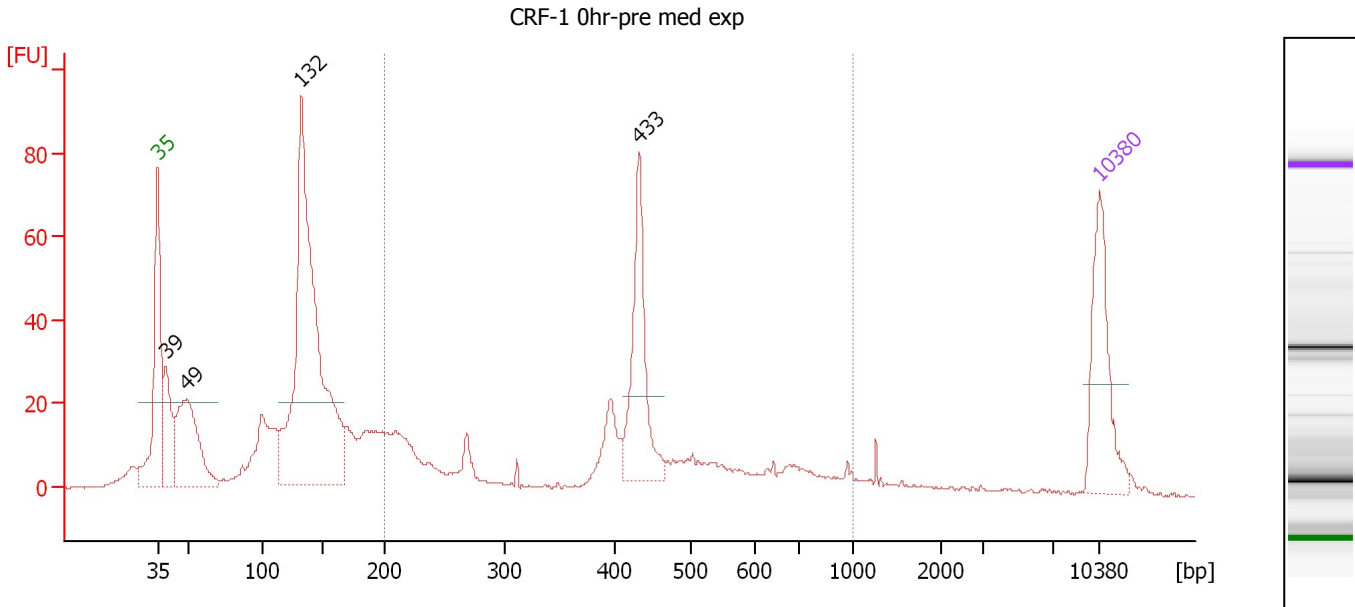
Region table for sample 3 : CRF-1 0hr-pre med cont

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,494.3	396	302.97	1,000	235.2	27	43.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : CRF-1 0hr-pre med exp

Number of peaks found: 4 Corr. Area 1: 357.1
 Noise: 0.3

Peak table for sample 4 : CRF-1 0hr-pre med exp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	39	82.60	3,203.7	
3	49	150.94	4,631.5	
4	132	516.47	5,924.9	
5	433	124.55	435.8	
6	10,380	75.00	10.9	Upper Marker

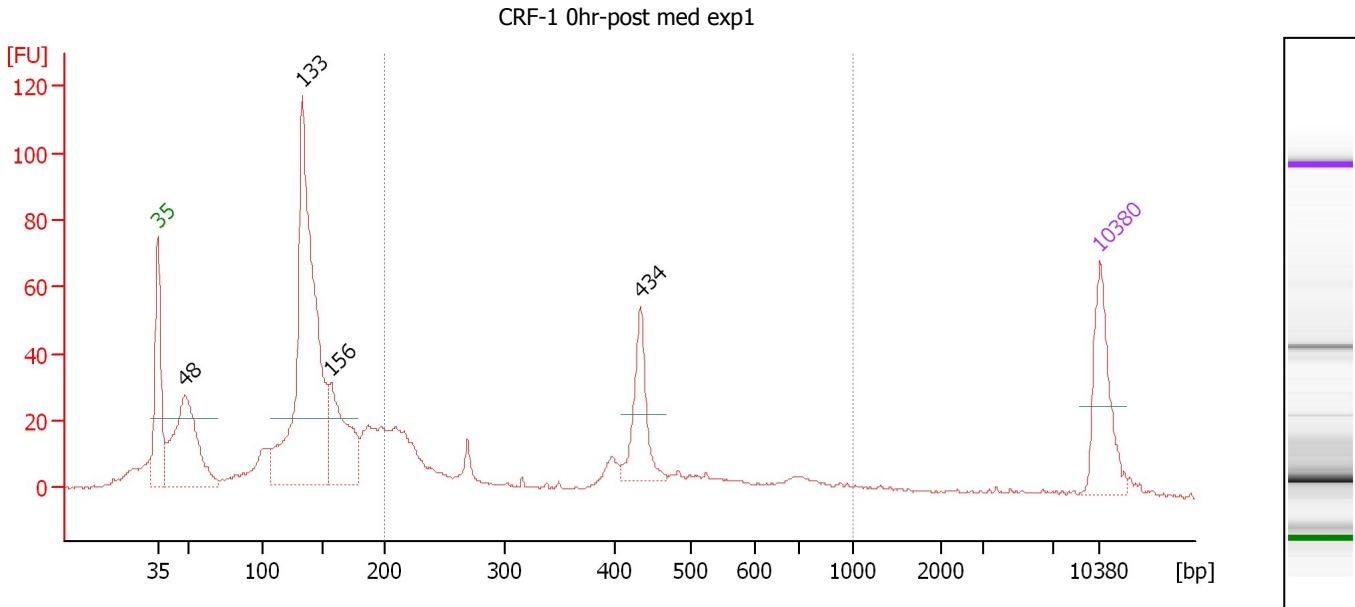
Region table for sample 4 : CRF-1 0hr-pre med exp

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,850.0	438	432.98	1,000	357.1	36	36.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : CRF-1 0hr-post med exp1

Number of peaks found: 4 Corr. Area 1: 311.2
 Noise: 0.3

Peak table for sample 5 : CRF-1 0hr-post med exp1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	235.59	7,379.2	
3	133	594.90	6,767.3	
4	156	149.54	1,452.3	
5	434	88.45	309.0	
6	10,380	75.00	10.9	Upper Marker

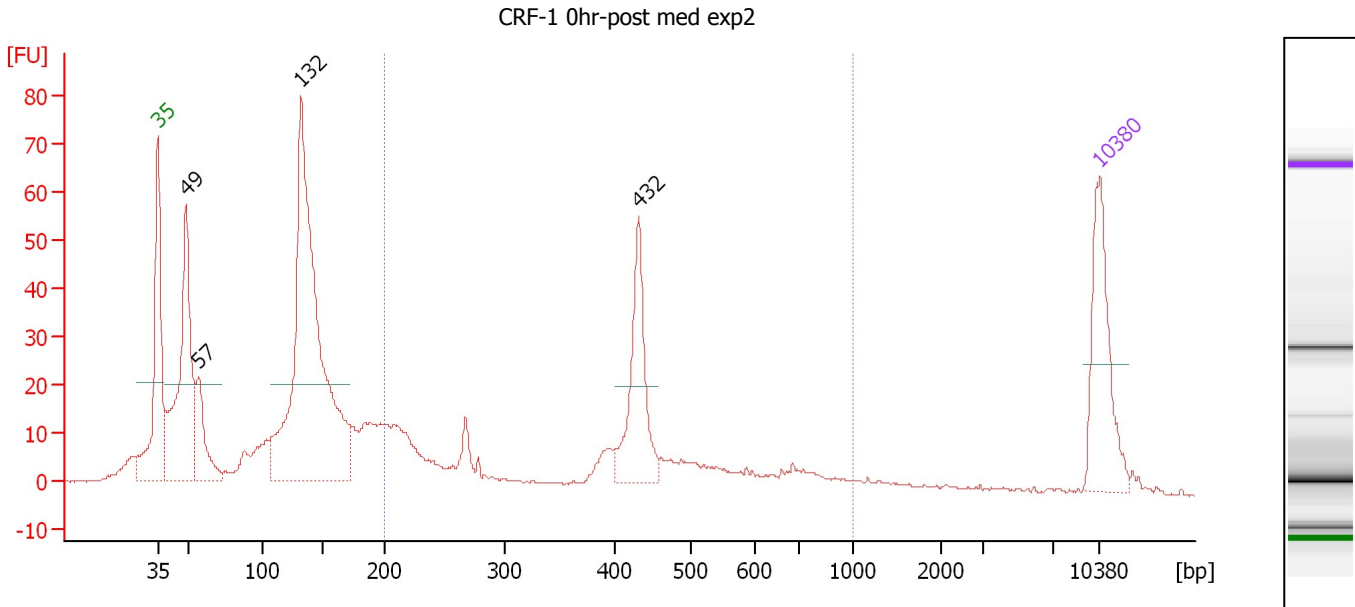
Region table for sample 5 : CRF-1 0hr-post med exp1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,003.6	408	423.08	1,000	311.2	29	41.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : CRF-1 0hr-post med exp2

Number of peaks found: 4 Corr. Area 1: 228.5
 Noise: 0.2

Peak table for sample 6 : CRF-1 0hr-post med exp2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	241.35	7,491.1	
3	57	71.31	1,899.7	
4	132	534.59	6,130.5	
5	432	103.66	363.8	
6	10,380	75.00	10.9	Upper Marker

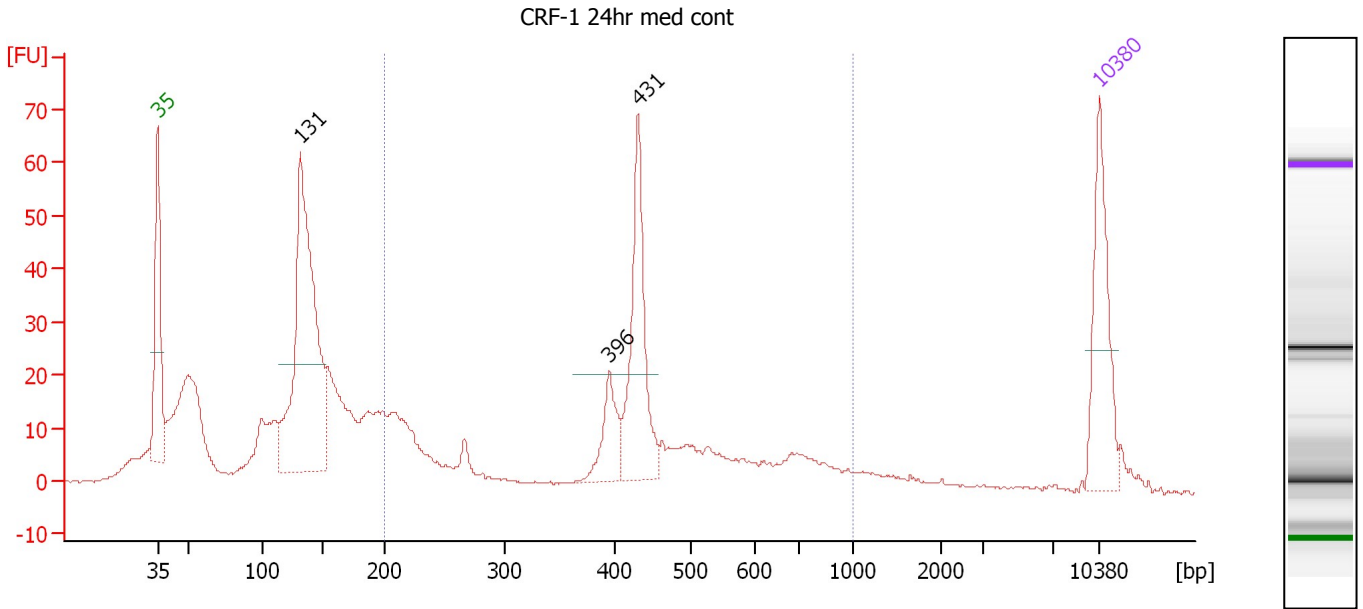
Region table for sample 6 : CRF-1 0hr-post med exp2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,398.4	407	305.28	1,000	228.5	28	36.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : CRF-1 24hr med cont

Number of peaks found: 3 Corr. Area 1: 345.7
 Noise: 0.2

Peak table for sample 7 : CRF-1 24hr med cont

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	131	367.17	4,232.6	
3	396	46.15	176.8	
4	431	130.61	459.2	
5	10,380	75.00	10.9	Upper Marker

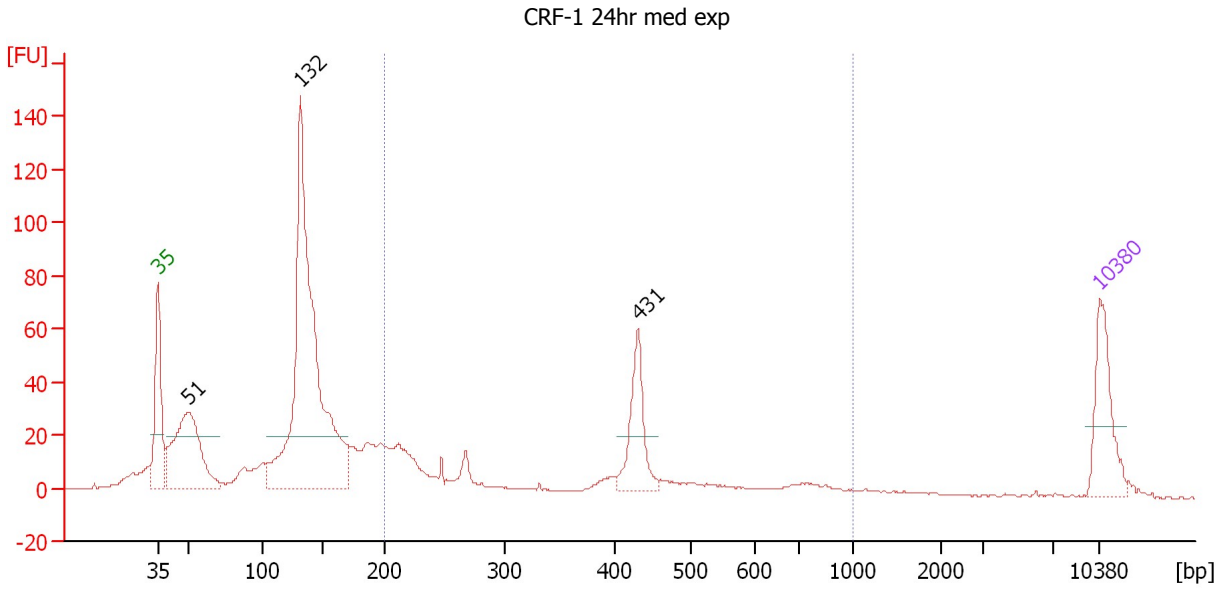
Region table for sample 7 : CRF-1 24hr med cont

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,051.8	446	483.91	1,000	345.7	38	37.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : CRF-1 24hr med exp

Number of peaks found: 3 Corr. Area 1: 289.1
 Noise: 0.3

Peak table for sample 8 : CRF-1 24hr med exp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	51	258.14	7,735.4	
3	132	753.31	8,665.2	
4	431	99.18	348.6	
5	10,380	75.00	10.9	Upper Marker

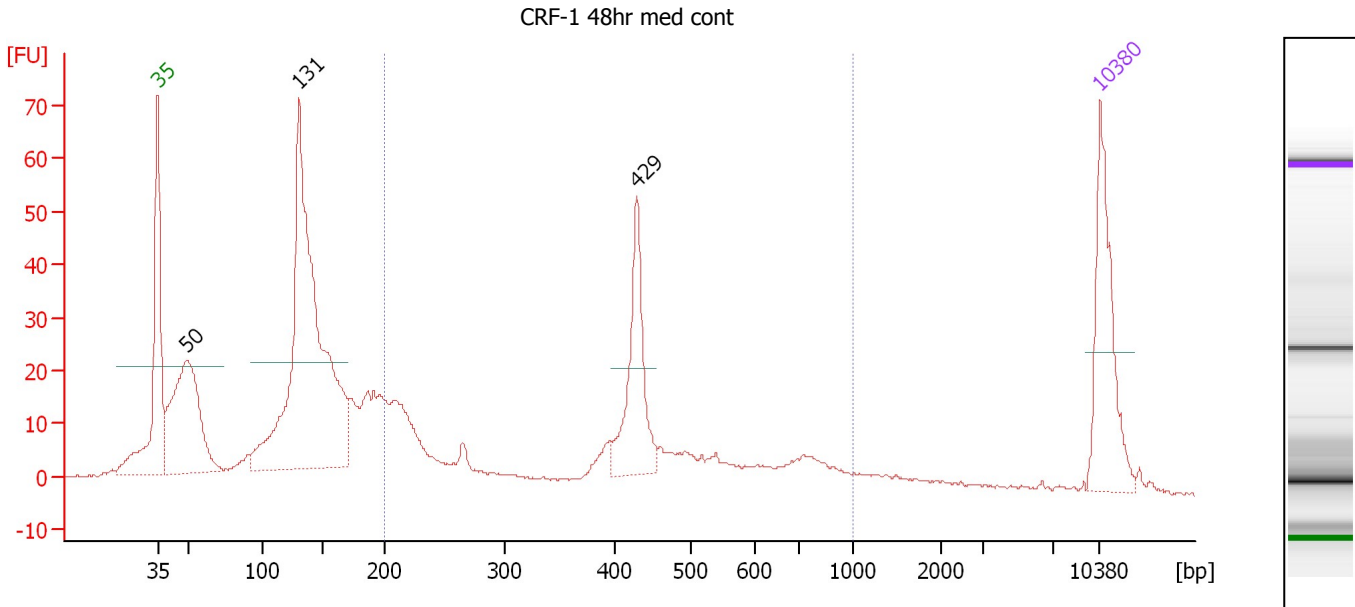
Region table for sample 8 : CRF-1 24hr med exp

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,735.3	401	364.26	1,000	289.1	26	41.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : CRF-1 48hr med cont

Number of peaks found: 3 Corr. Area 1: 256.8
 Noise: 0.2

Peak table for sample 9 : CRF-1 48hr med cont

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	196.24	6,000.3	
3	131	488.22	5,664.0	
4	429	97.48	344.3	
5	10,380	75.00	10.9	Upper Marker

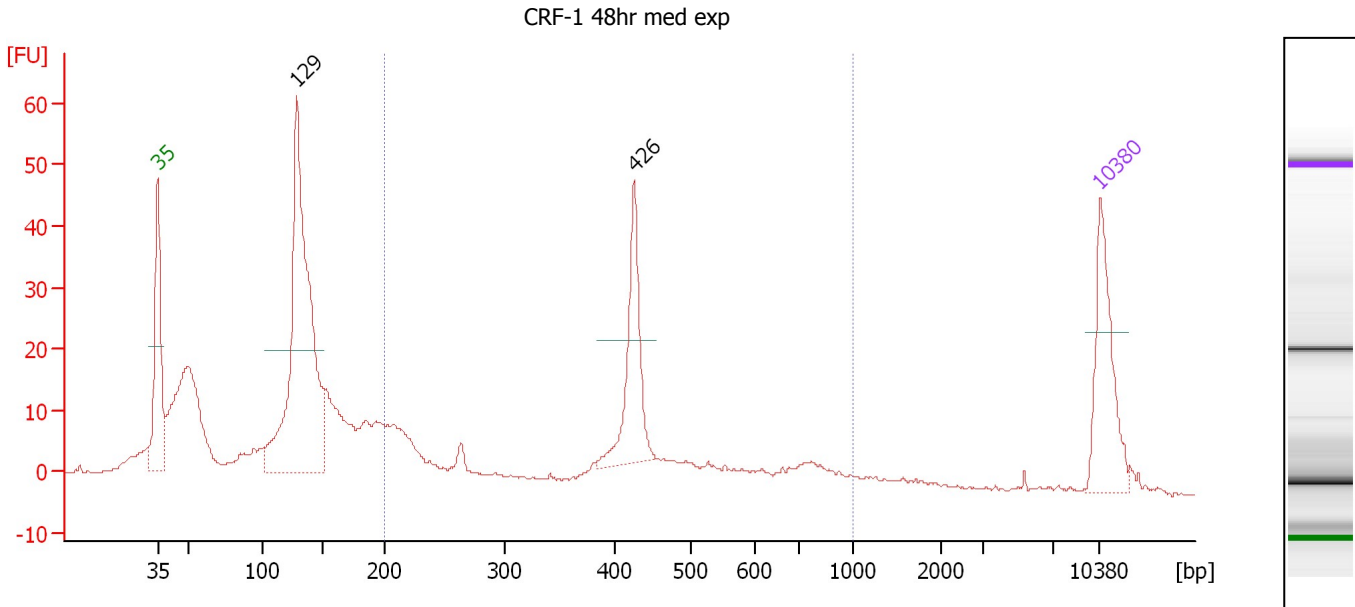
Region table for sample 9 : CRF-1 48hr med cont

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,487.0	435	332.53	1,000	256.8	34	39.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : CRF-1 48hr med exp

Number of peaks found: 2 Corr. Area 1: 187.4
 Noise: 0.2

Peak table for sample 10 : CRF-1 48hr med exp

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	129	445.90	5,257.0	
3	426	109.62	389.9	
4	10,380	75.00	10.9	Upper Marker

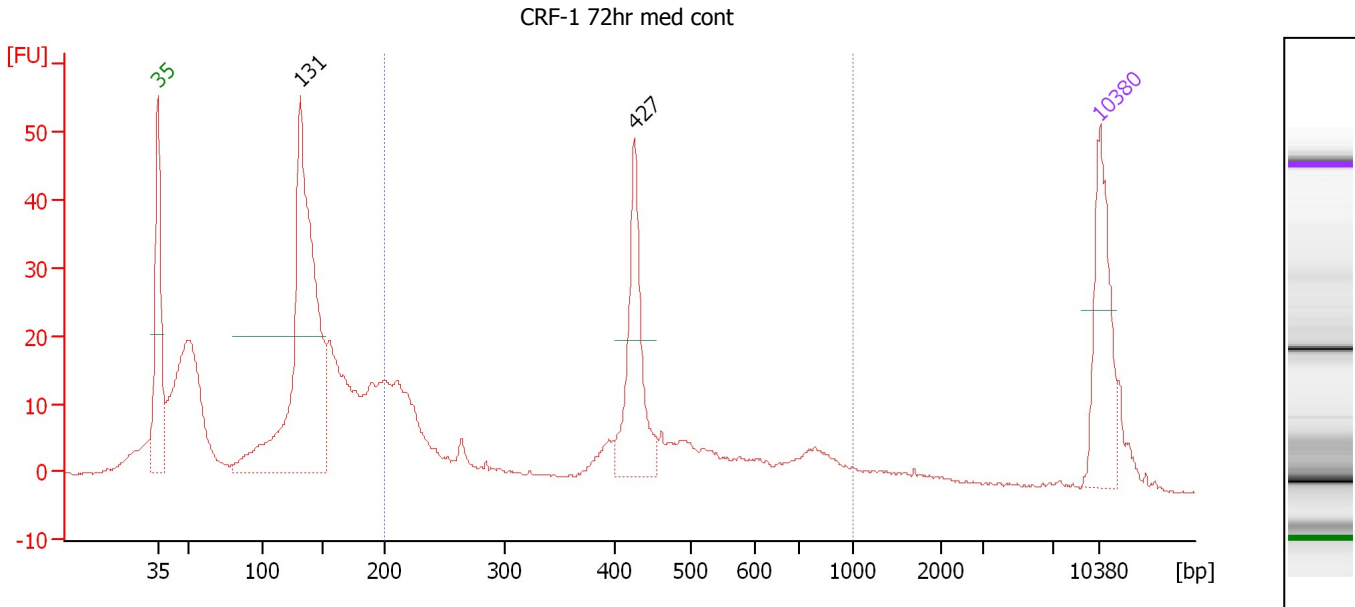
Region table for sample 10 : CRF-1 48hr med exp

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,539.5	437	354.99	1,000	187.4	31	38.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : CRF-1 72hr med cont

Number of peaks found: 2 Corr. Area 1: 257.9
 Noise: 0.2

Peak table for sample 11 : CRF-1 72hr med cont

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	131	442.43	5,099.6	
3	427	120.18	426.9	
4	10,380	75.00	10.9	Upper Marker

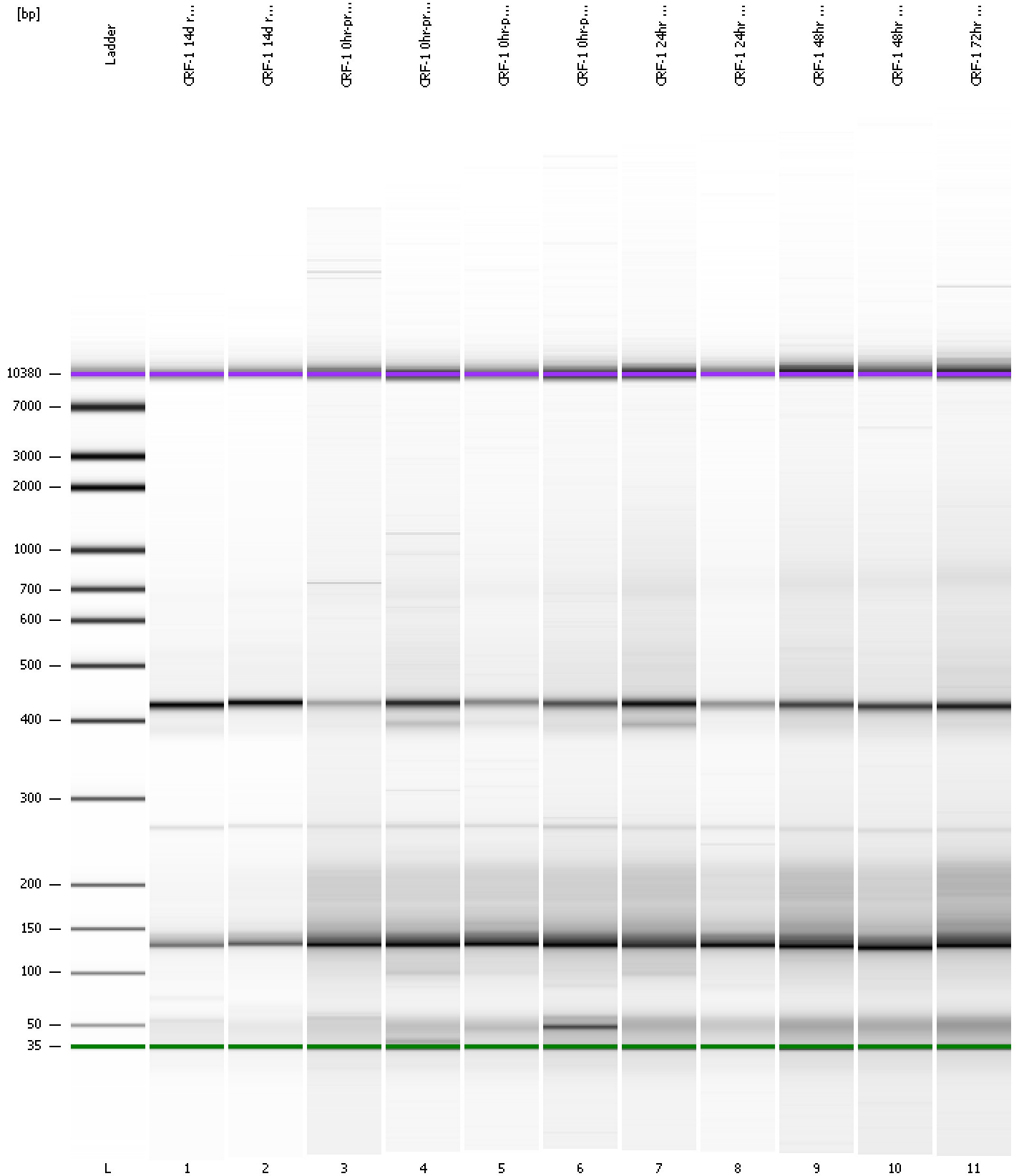
Region table for sample 11 : CRF-1 72hr med cont

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	2,084.7	434	463.53	1,000	257.9	35	41.1	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
Modified: 3/29/2012 2:52:31 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad

Created: 3/29/2012 2:11:10 PM
 Modified: 3/29/2012 2:52:31 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		3/29/2012 2:52:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-29\2012-03-29_003.xad)		Instrument	Run		3/29/2012 2:11:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/29/2012 2:11:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/29/2012 2:11:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/29/2012 2:11:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/29/2012 2:11:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/29/2012 2:11:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/29/2012 2:11:15 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1