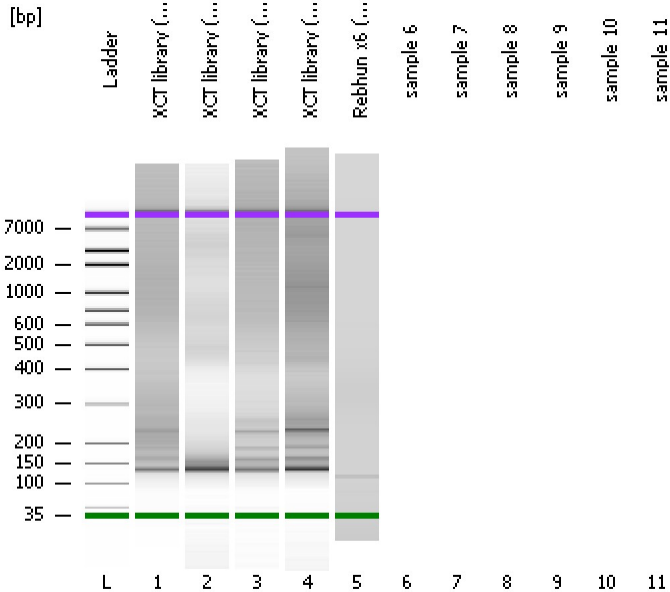


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electrophoresis File Run Summary



Instrument Information:

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

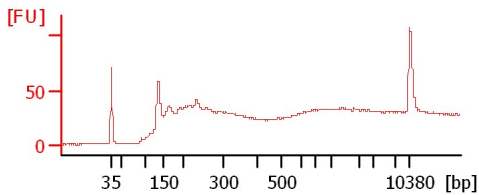
Assay Information:

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

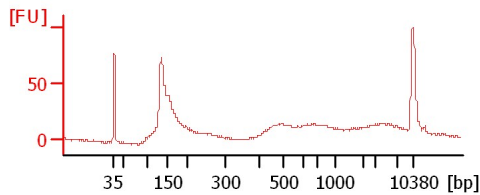
Chip Information:

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

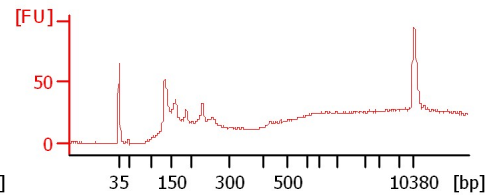
XCT library (150ng tot. RNA input)



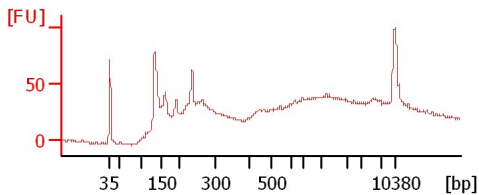
XCT library (50ng tot. RNA input)



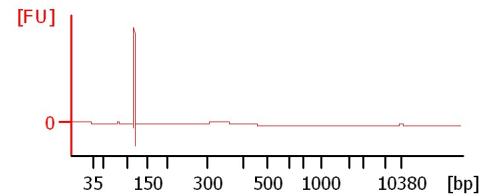
XCT library (20ng tot. RNA input)



XCT library (0.3ng tot. RNA input)



Rebhun x6 (pooled libraries)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
Modified: 10/22/2014 4:12:59 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
XCT library (150ng tot. RNA input)		<input type="checkbox"/>		✓		
XCT library (50ng tot. RNA input)		<input type="checkbox"/>		✓		
XCT library (20ng tot. RNA input)		<input type="checkbox"/>		✓		
XCT library (0.3ng tot. RNA input)		<input type="checkbox"/>		✓		
Rebhun x6 (pooled libraries)		<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\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 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

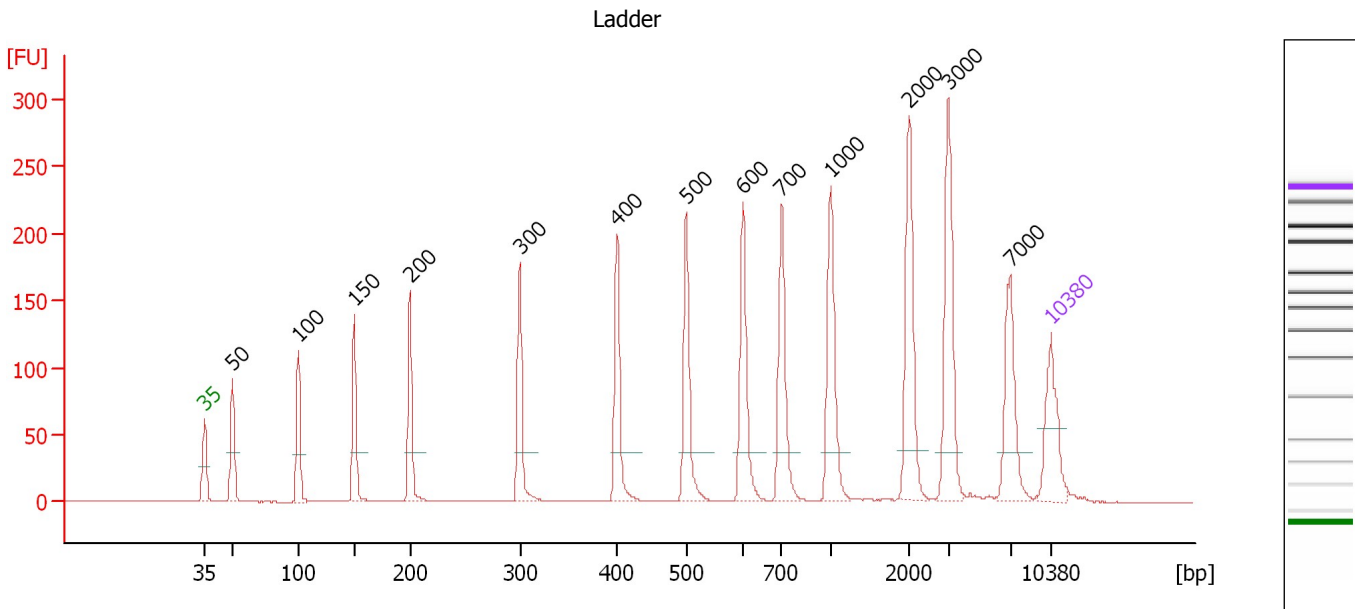
Ladder

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\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

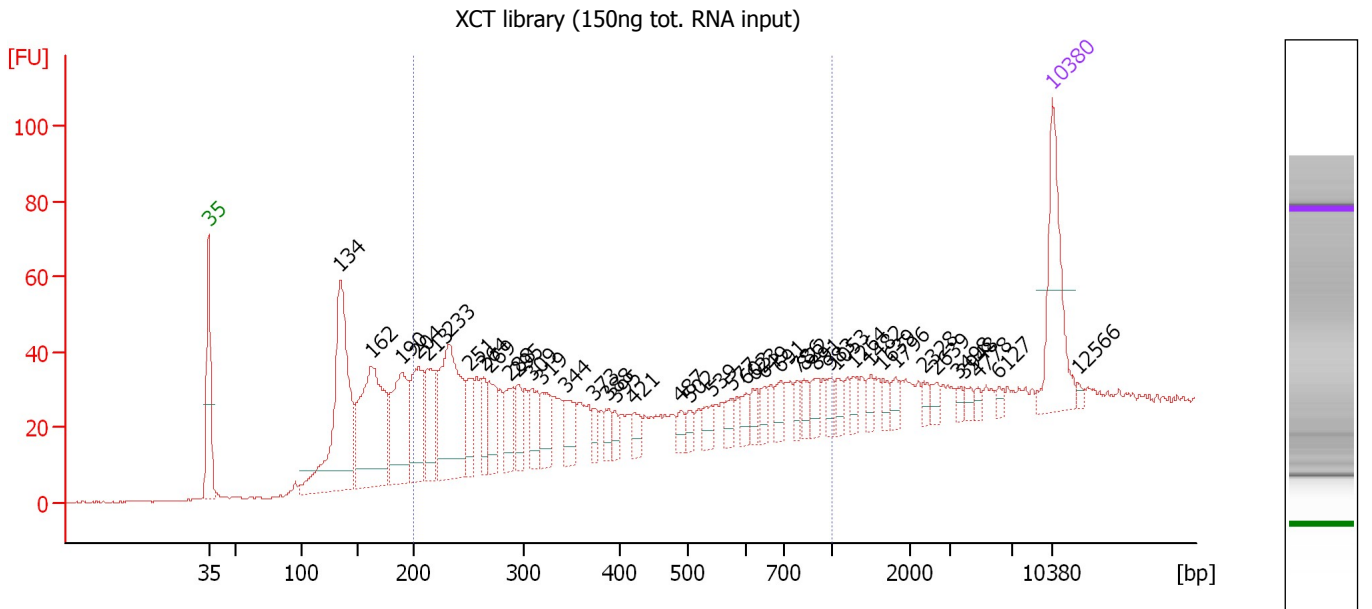
Peak table for Ladder

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\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : XCT library (150ng tot. RNA input)

Number of peaks found: 42 Corr. Area 1: 754.9
 Noise: 0.2

Peak table for sample 1 : XCT library (150ng tot. RNA input)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	134	267.20	3,017.2	
3	162	213.68	2,004.4	
4	190	110.87	884.3	
5	204	90.70	672.0	
6	213	60.70	432.2	
7	233	161.83	1,053.6	
8	251	35.46	213.8	
9	264	31.12	178.7	
10	269	44.03	247.8	
11	288	33.31	175.4	
12	295	31.08	159.6	
13	309	35.20	172.8	
14	319	37.39	177.8	
15	344	31.94	140.8	
16	373	13.31	54.0	
17	388	15.10	58.9	
18	395	11.34	43.5	
19	421	16.15	58.2	
20	487	10.90	33.9	
21	502	11.37	34.3	
22	539	14.29	40.2	
23	577	13.46	35.4	
24	603	13.17	33.1	
25	623	13.39	32.6	
26	649	11.38	26.6	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad


Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : XCT library (150ng tot. RNA input)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	691	15.41	33.8	
28	786	10.57	20.4	
29	822	12.62	23.3	
30	891	15.20	25.8	
31	983	10.61	16.4	
32	1,053	10.79	15.5	
33	1,264	10.41	12.5	
34	1,482	9.62	9.8	
35	1,639	8.50	7.9	
36	1,796	9.25	7.8	
37	2,328	7.15	4.7	
38	2,639	7.29	4.2	
39	3,498	5.64	2.4	
40	3,948	5.73	2.2	
41	4,778	4.22	1.3	
42	6,127	4.96	1.2	
43	▶ 10,380	75.00	10.9	Upper Marker
44	12,566	0.00	0.0	

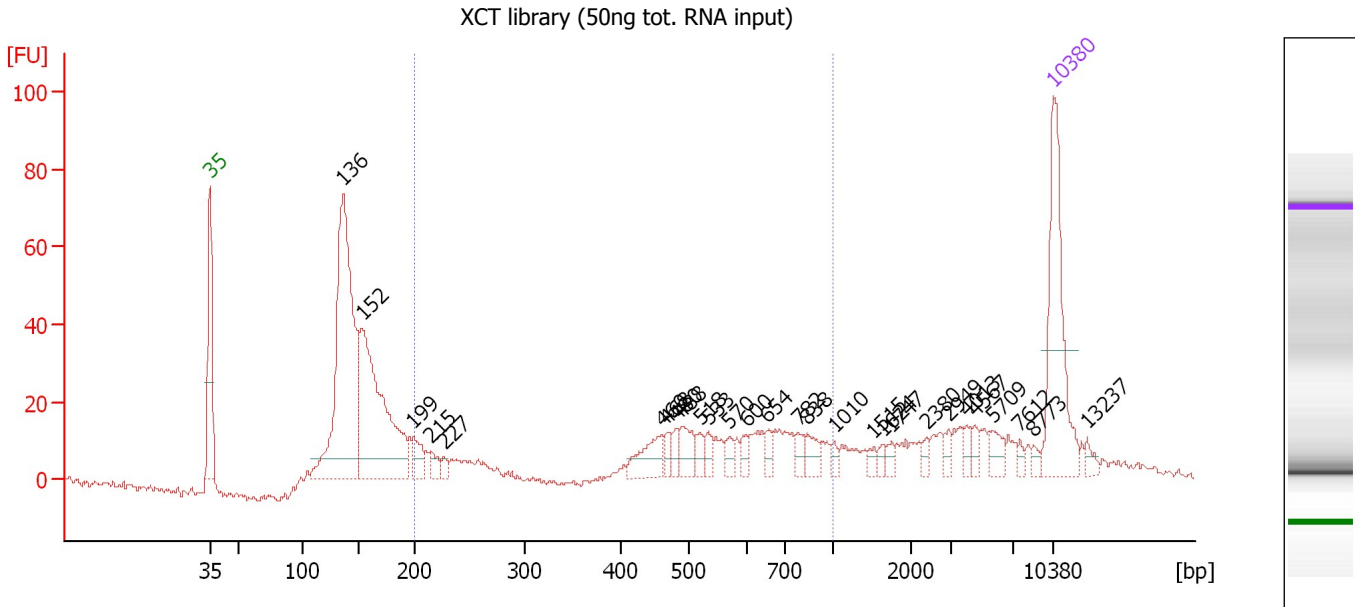
Region table for sample 1 : XCT library (150ng tot. RNA input)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	411	1,000	754.9	59	49.1	946.84	4,563.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : XCT library (50ng tot. RNA input)

Number of peaks found: 28 Corr. Area 1: 276.1
 Noise: 0.9

Peak table for sample 2 : XCT library (50ng tot. RNA input)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	136	298.75	3,336.0	
3	152	213.70	2,124.0	
4	199	19.17	146.2	
5	215	10.54	74.3	
6	227	5.47	36.5	
7	460	27.53	90.7	
8	468	7.62	24.7	
9	480	8.11	25.6	
10	488	19.32	60.0	
11	518	9.20	26.9	
12	533	7.84	22.3	
13	570	8.07	21.5	
14	600	7.25	18.3	
15	654	7.22	16.7	
16	782	8.32	16.1	
17	838	12.10	21.9	
18	1,010	4.21	6.3	
19	1,515	4.00	4.0	
20	1,624	3.82	3.6	
21	1,747	4.73	4.1	
22	2,380	4.02	2.6	
23	2,949	5.33	2.7	
24	4,013	5.20	2.0	
25	4,567	4.77	1.6	
26	5,709	10.09	2.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad


Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...

... Peak table for sample 2 : XCT library (50ng tot. RNA input)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	7,612	3.24	0.6	
28	8,773	3.14	0.5	
29	10,380	75.00	10.9	Upper Marker
30	13,237	0.00	0.0	

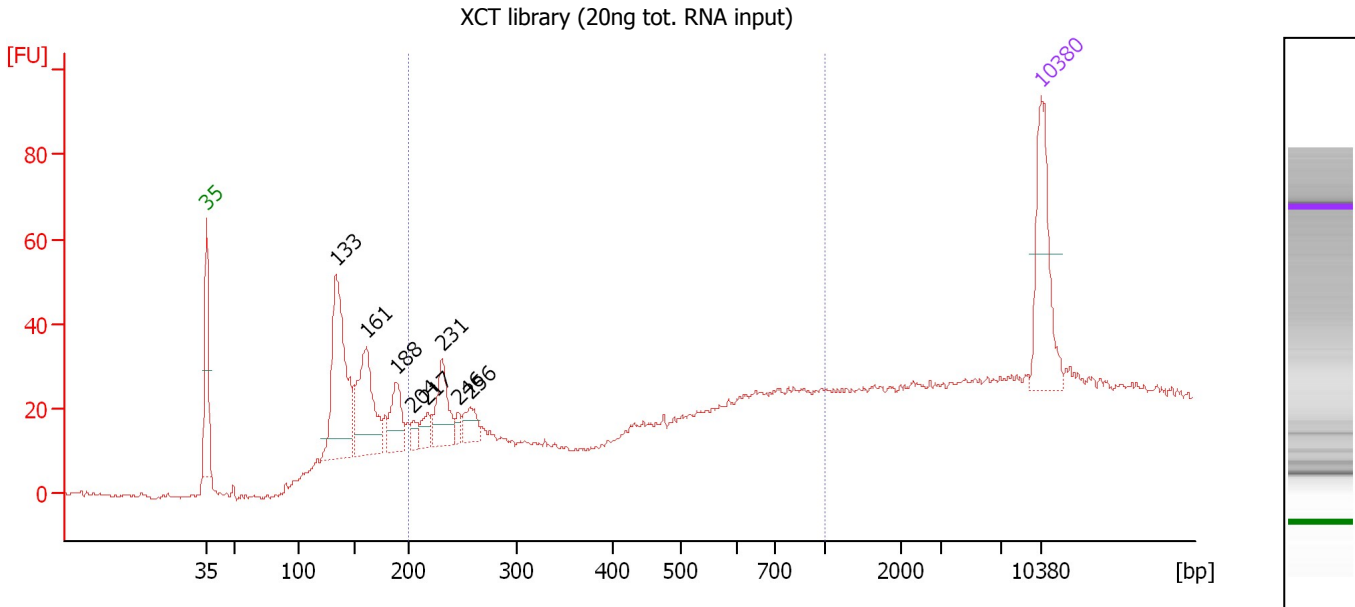
Region table for sample 2 : XCT library (50ng tot. RNA input)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	544	1,000	276.1	32	36.5	255.90	950.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : XCT library (20ng tot. RNA input)

Number of peaks found: 8 Corr. Area 1: 279.1
 Noise: 0.5

Peak table for sample 3 : XCT library (20ng tot. RNA input)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	211.39	2,407.4	
3	161	131.23	1,237.5	
4	188	52.55	423.6	
5	204	12.18	90.6	
6	217	18.75	131.0	
7	231	59.16	388.5	
8	246	9.96	61.4	
9	256	25.87	152.9	
10	10,380	75.00	10.9	Upper Marker

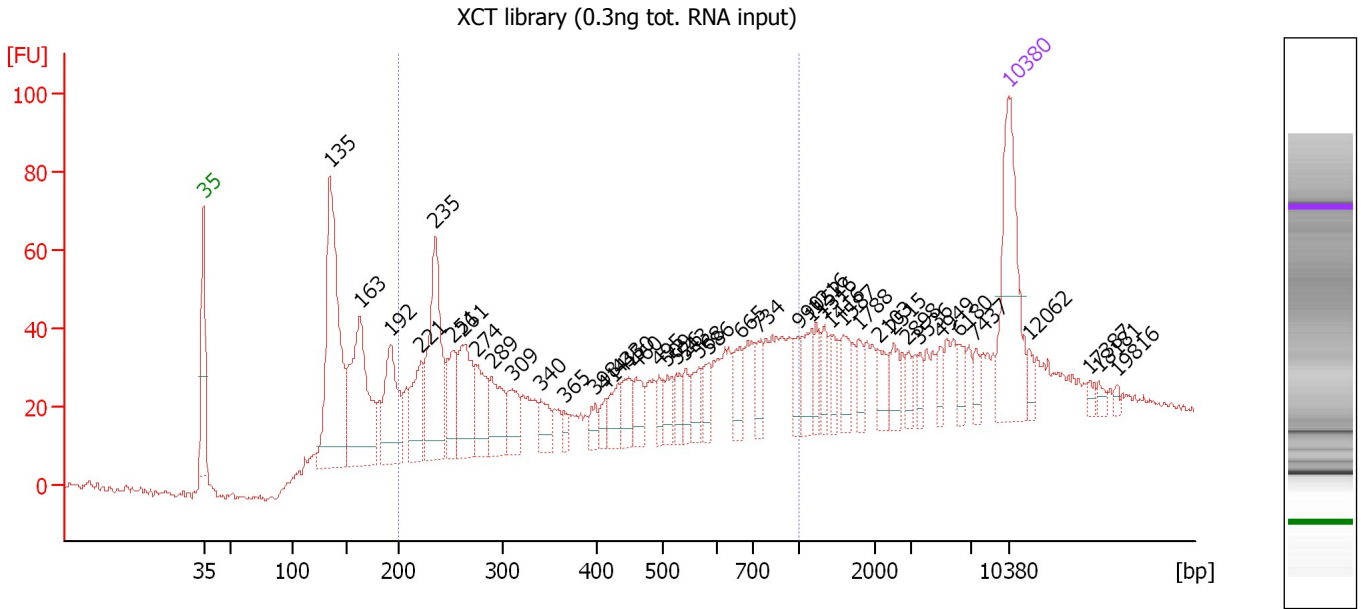
Region table for sample 3 : XCT library (20ng tot. RNA input)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	471	1,000	279.1	40	49.5	396.80	1,854.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : XCT library (0.3ng tot. RNA input)

Number of peaks found: 43 Corr. Area 1: 919.4
 Noise: 0.8

Peak table for sample 4 : XCT library (0.3ng tot. RNA input)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	135	224.71	2,527.1	
3	163	147.26	1,370.1	
4	192	82.10	647.4	
5	221	46.72	320.1	
6	235	122.65	791.1	
7	251	42.16	254.8	
8	261	66.22	384.6	
9	274	43.37	240.1	
10	289	40.06	210.1	
11	309	28.54	139.8	
12	340	19.75	87.9	
13	365	8.26	34.3	
14	398	10.37	39.5	
15	414	10.28	37.6	
16	433	20.17	70.6	
17	450	19.40	65.3	
18	460	18.52	61.0	
19	495	12.16	37.2	
20	509	15.52	46.2	
21	526	12.94	37.3	
22	543	12.24	34.1	
23	568	17.78	47.4	
24	586	15.14	39.2	
25	665	21.54	49.1	
26	734	15.13	31.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad


Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...

... Peak table for sample 4 : XCT library (0.3ng tot. RNA input)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	990	12.37	18.9	
28	1,152	17.95	23.6	
29	1,216	12.70	15.8	
30	1,316	12.21	14.1	
31	1,416	11.06	11.8	
32	1,587	16.22	15.5	
33	1,788	11.07	9.4	
34	2,103	14.20	10.2	
35	2,515	12.30	7.4	
36	2,898	7.51	3.9	
37	3,536	7.28	3.1	
38	4,949	8.16	2.5	
39	6,180	9.05	2.2	
40	7,437	7.45	1.5	
41	10,380	75.00	10.9	Upper Marker
42	12,062	0.00	0.0	
43	17,387	0.00	0.0	
44	18,181	0.00	0.0	
45	19,816	0.00	0.0	

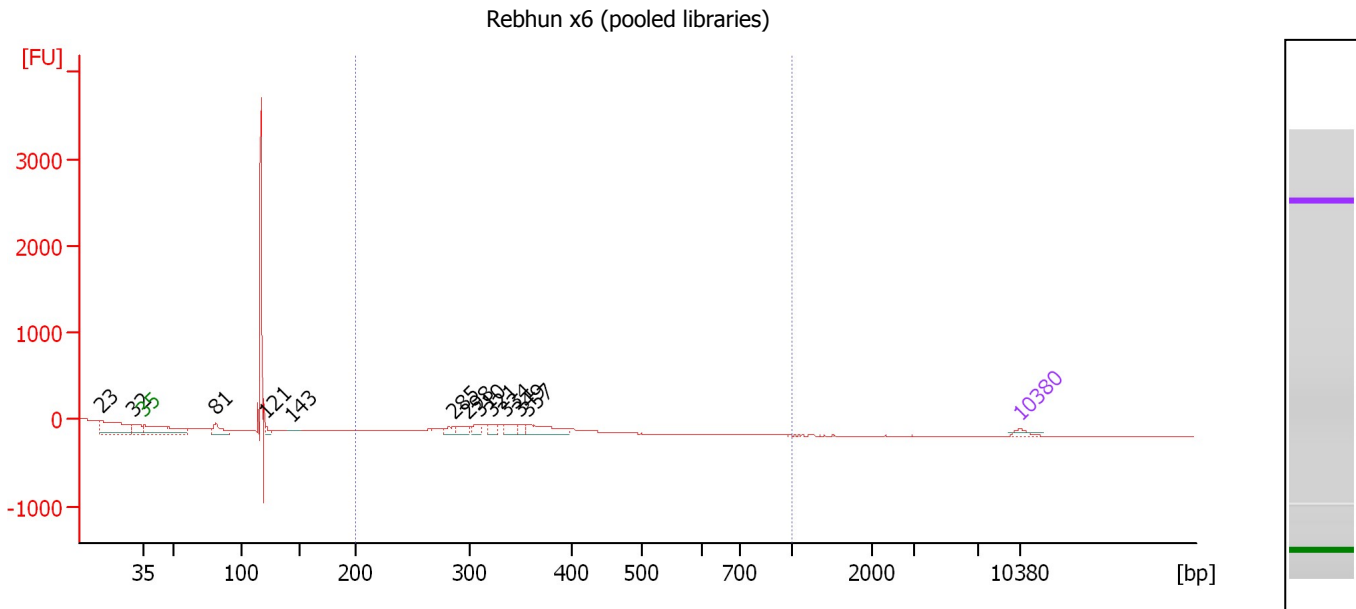
Region table for sample 4 : XCT library (0.3ng tot. RNA input)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	460	1,000	919.4	53	47.0	884.42	3,944.5	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Rebhun x6 (pooled libraries)

Number of peaks found: 12 Corr. Area 1: 129.2
 Noise: 0.9

Peak table for sample 5 : Rebhun x6 (pooled libraries)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	23	0.00	0.0	
2	32	0.00	0.0	
3	35	125.00	5,411.3	Lower Marker
4	81	435.25	8,102.0	
5	121	112.88	1,410.9	
6	143	8.06	85.7	
7	285	181.54	964.4	
8	298	223.24	1,134.4	
9	310	189.07	922.7	
10	321	167.02	787.3	
11	334	231.46	1,048.5	
12	349	138.57	601.4	
13	357	553.20	2,348.4	
14	10,380	75.00	10.9	Upper Marker

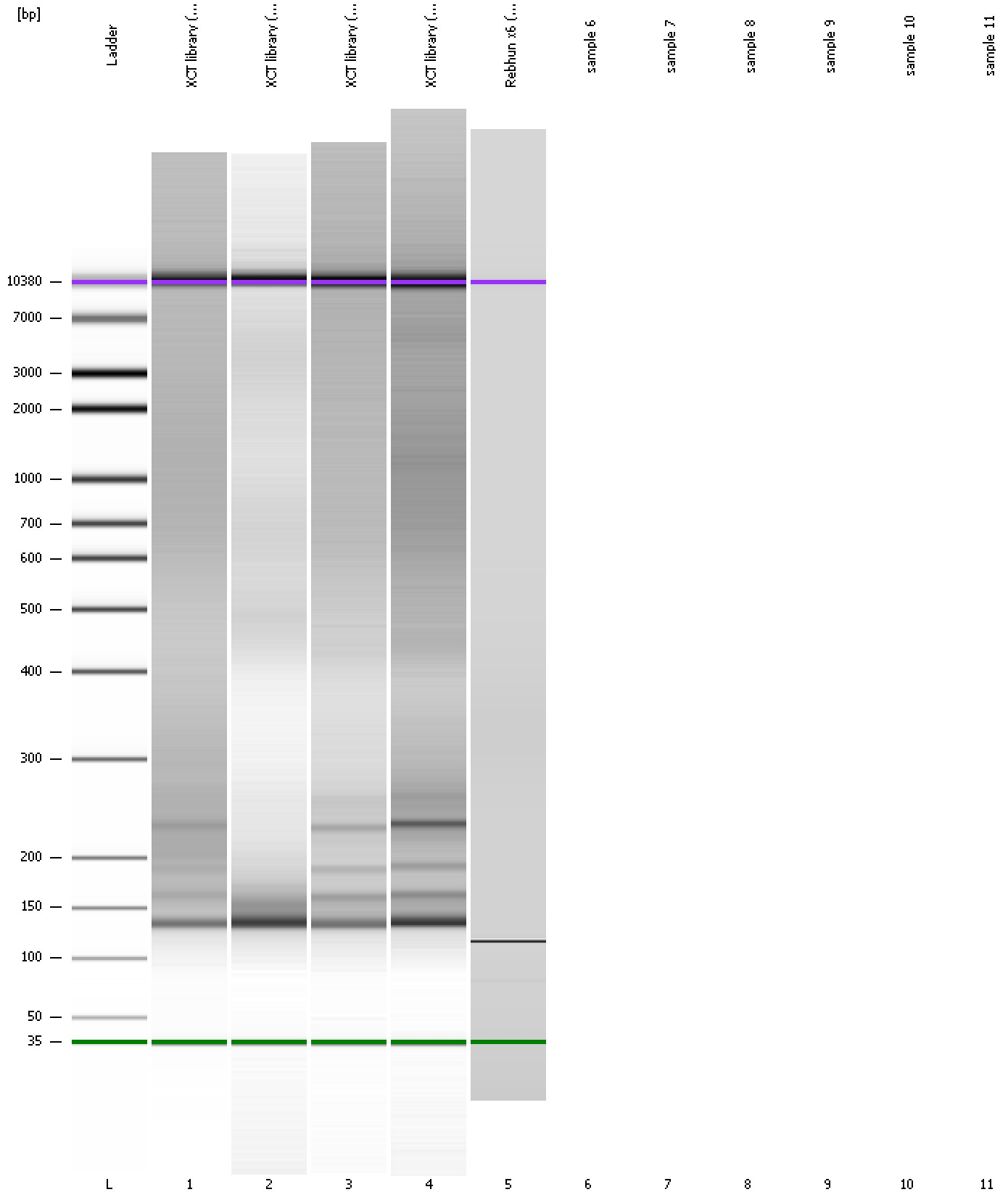
Region table for sample 5 : Rebhun x6 (pooled libraries)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	338	1,000	129.2	8	4.7	143.58	644.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
Modified: 10/22/2014 4:12:59 PM

Gel Image

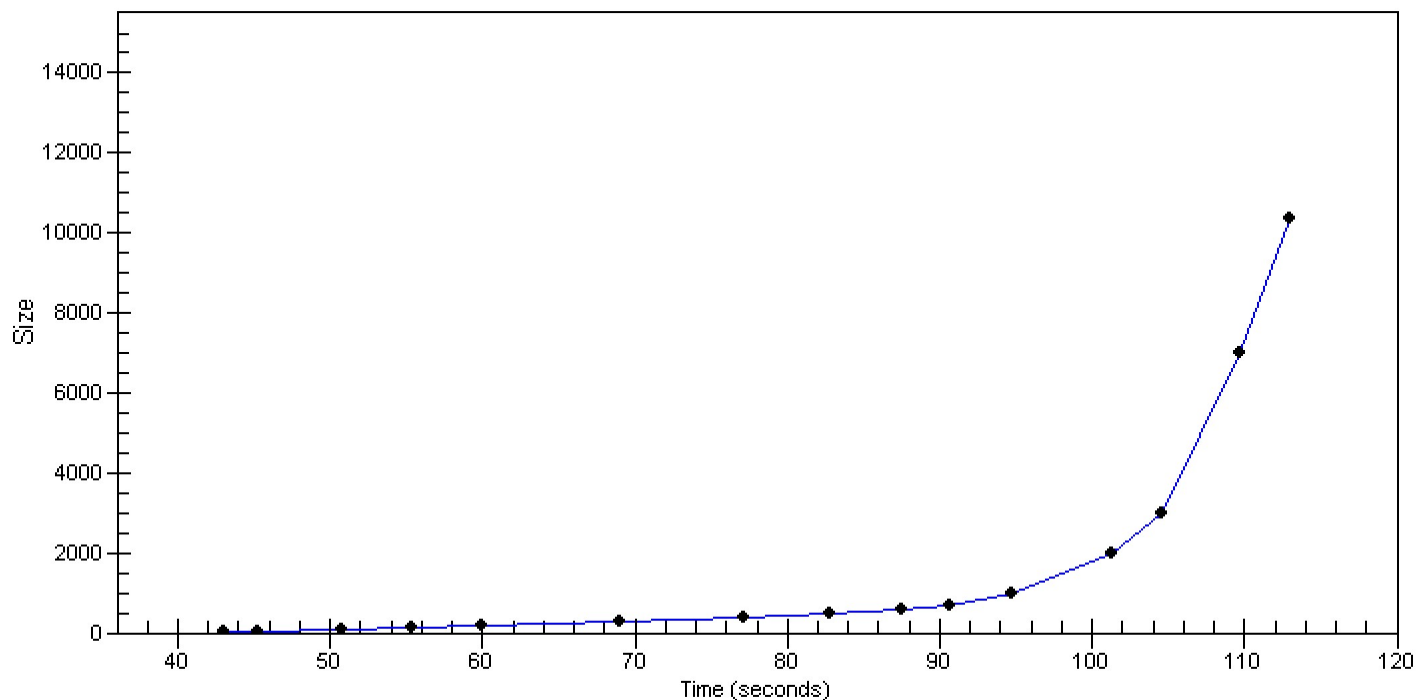


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
Modified: 10/22/2014 4:12:59 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
Modified: 10/22/2014 4:12:59 PM

Invalid Samples

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\2014-10-22\2014-10-22_005.xad

Created: 10/22/2014 3:48:46 PM
 Modified: 10/22/2014 4:12:59 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		10/22/2014 4:12:57 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-10-22\2014-10-22_005.xad)		Instrument	Run		10/22/2014 3:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/22/2014 3:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/22/2014 3:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/22/2014 3:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/22/2014 3:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/22/2014 3:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/22/2014 3:48:51 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1