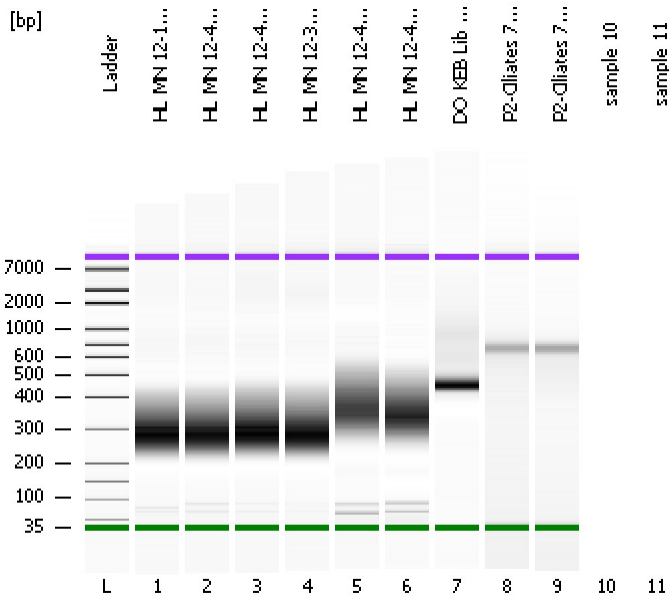


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
Modified: 3/13/2013 4:51:54 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

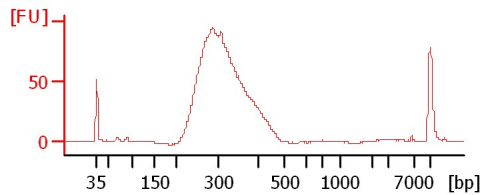
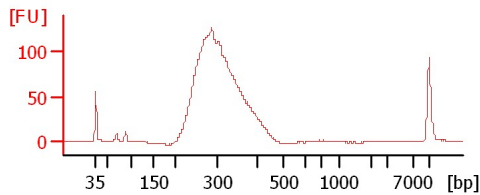
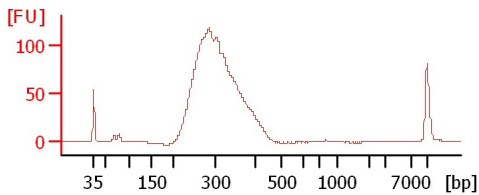
Chip Information:

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

HL MN 12-16 mRNA Lib 1:2

HL MN 12-43 mRNA Lib 1:2

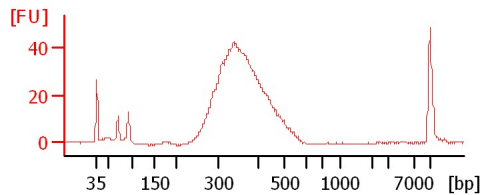
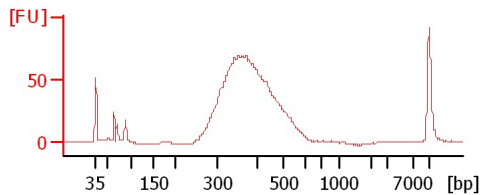
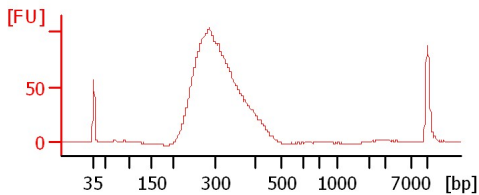
HL MN 12-49 mRNA Lib 1:4



HL MN 12-33 mRNA Lib 1:5

HL MN 12-42 mRNA Lib

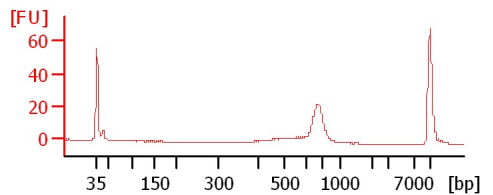
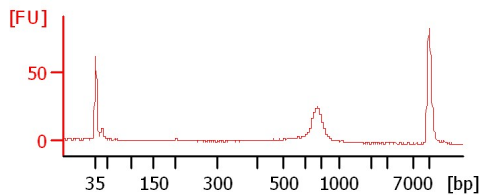
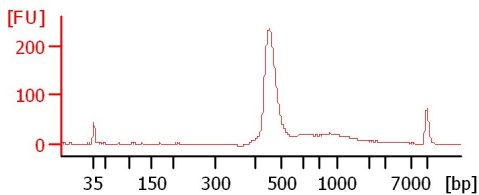
HL MN 12-45 mRNA Lib



DO_KEB Lib 1:4

P2-Ciliates 7/5/12

P2-Ciliates 7/3/12



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HL MN 12-16 mRNA Lib 1:2		<input type="checkbox"/>	✓			
HL MN 12-43 mRNA Lib 1:2		<input type="checkbox"/>	✓			
HL MN 12-49 mRNA Lib 1:4		<input type="checkbox"/>	✓			
HL MN 12-33 mRNA Lib 1:5		<input type="checkbox"/>	✓			
HL MN 12-42 mRNA Lib		<input type="checkbox"/>	✓			
HL MN 12-45 mRNA Lib		<input type="checkbox"/>	✓			
DO_KEB Lib 1:4		<input type="checkbox"/>	✓			
P2-Ciliates 7/5/12		<input type="checkbox"/>	✓			
P2-Ciliates 7/3/12		<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\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
Modified: 3/13/2013 4:51:54 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

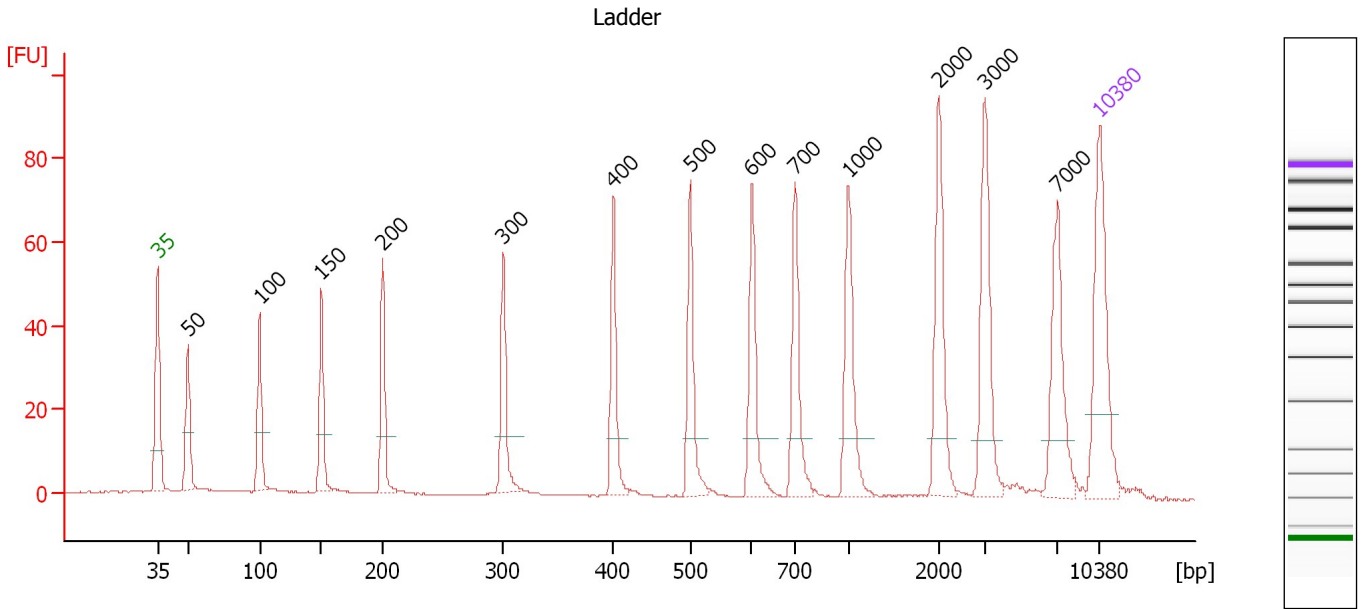
Ladder

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\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

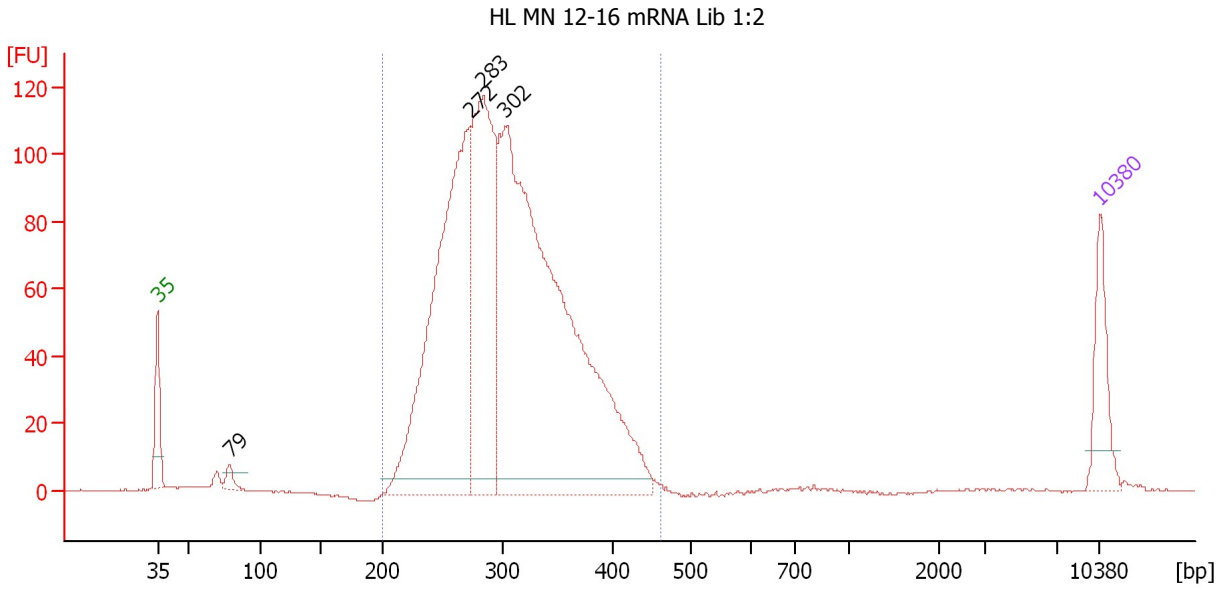
Peak table for Ladder

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\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : HL MN 12-16 mRNA Lib 1:2

Number of peaks found: 4 Corr. Area 1: 1,730.4
 Noise: 0.2

Peak table for sample 1 : HL MN 12-16 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	79	21.66	415.0	
3	272	844.53	4,699.4	
4	283	537.63	2,874.9	
5	302	1,439.41	7,218.3	
6	10,380	75.00	10.9	Upper Marker

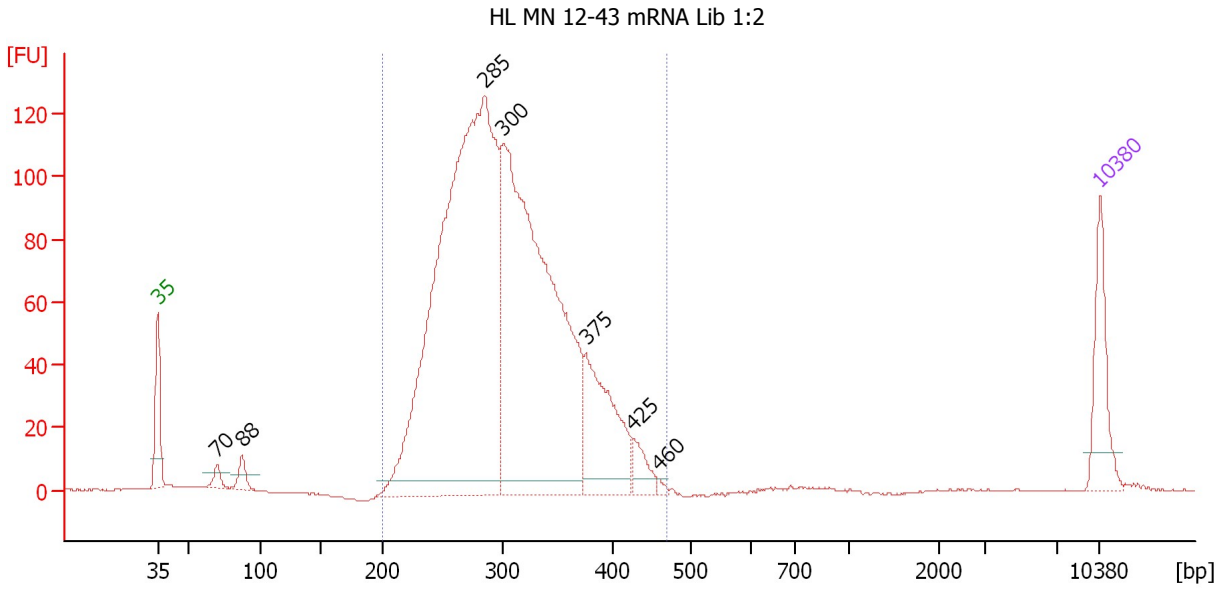
Region table for sample 1 : HL MN 12-16 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	462	305	13,773.6	2,691.54	1,730.4	98	15.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : HL MN 12-43 mRNA Lib 1:2

Number of peaks found: 7 Corr. Area 1: 1,821.6
 Noise: 0.1

Peak table for sample 2 : HL MN 12-43 mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	20.61	444.1	
3	88	28.55	493.1	
4	285	1,436.96	7,645.2	
5	300	1,058.03	5,339.1	
6	375	204.71	826.1	
7	425	37.82	134.7	
8	460	5.32	17.5	
9	10,380	75.00	10.9	Upper Marker

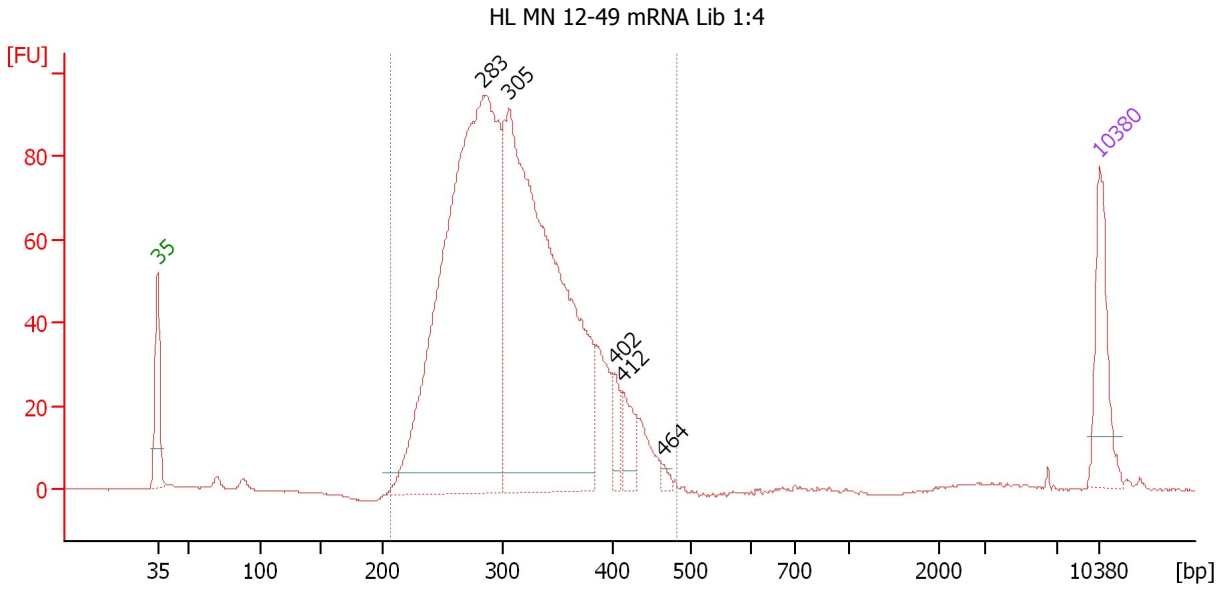
Region table for sample 2 : HL MN 12-43 mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	468	304	13,681.1	2,664.68	1,821.6	97	16.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : HL MN 12-49 mRNA Lib 1:4

Number of peaks found: 5 Corr. Area 1: 1,446.3
 Noise: 0.1

Peak table for sample 3 : HL MN 12-49 mRNA Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	283	1,183.83	6,339.9	
3	305	1,034.88	5,141.9	
4	402	31.80	119.8	
5	412	43.93	161.6	
6	464	7.06	23.1	
7	10,380	75.00	10.9	Upper Marker

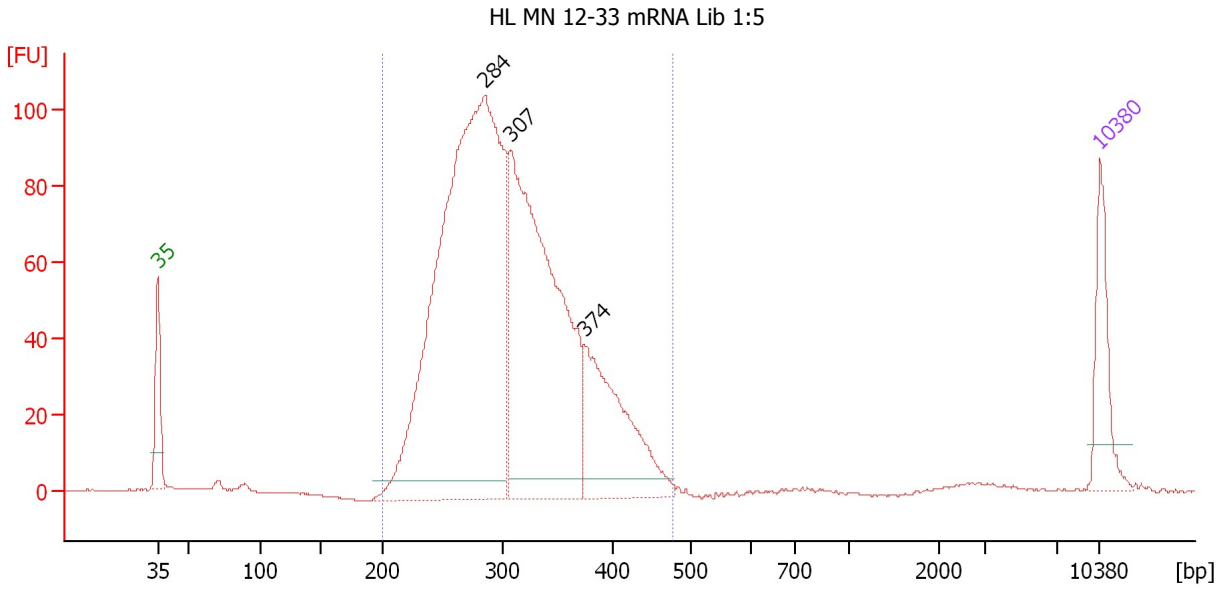
Region table for sample 3 : HL MN 12-49 mRNA Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
207	482	312	11,844.8	2,360.71	1,446.3	98	16.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HL MN 12-33 mRNA Lib 1:5

Number of peaks found: 3 Corr. Area 1: 1,539.0
 Noise: 0.2

Peak table for sample 4 : HL MN 12-33 mRNA Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	1,362.89	7,264.7	
3	307	798.37	3,939.7	
4	374	269.42	1,092.8	
5	10,380	75.00	10.9	Upper Marker

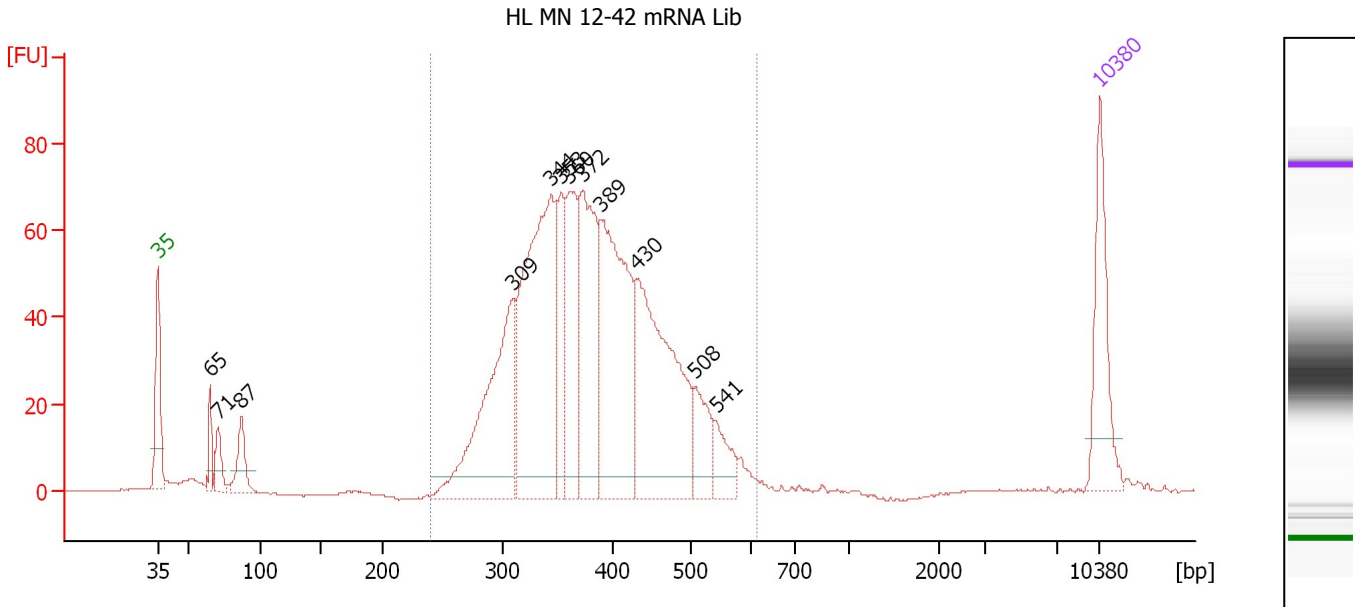
Region table for sample 4 : HL MN 12-33 mRNA Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	477	307	11,915.9	2,337.78	1,539.0	98	16.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : HL MN 12-42 mRNA Lib

Number of peaks found: 12 Corr. Area 1: 1,150.5
 Noise: 0.2

Peak table for sample 5 : HL MN 12-42 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	65	26.69	623.0	
3	71	31.88	680.7	
4	87	47.39	822.7	
5	309	249.08	1,219.8	
6	344	353.30	1,556.5	
7	353	86.51	371.3	
8	360	125.46	527.6	
9	372	185.40	754.3	
10	389	266.93	1,038.7	
11	430	271.46	957.4	
12	508	54.48	162.6	
13	541	35.45	99.2	
14	10,380	75.00	10.9	Upper Marker

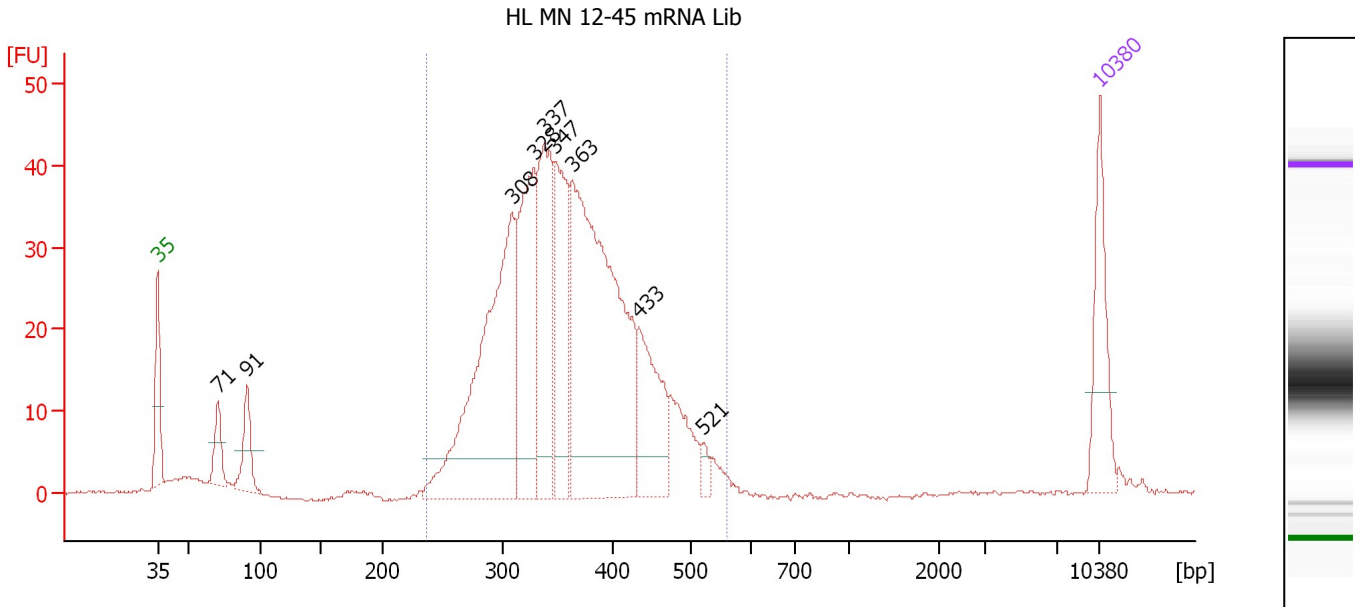
Region table for sample 5 : HL MN 12-42 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
240	614	386	6,510.4	1,592.67	1,150.5	94	17.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HL MN 12-45 mRNA Lib

Number of peaks found: 9 Corr. Area 1: 641.3
 Noise: 0.2

Peak table for sample 6 : HL MN 12-45 mRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	71	44.66	959.6	
3	91	64.94	1,078.4	
4	308	439.08	2,158.6	
5	328	212.91	984.1	
6	337	214.00	962.1	
7	347	175.85	768.3	
8	363	546.21	2,281.5	
9	433	126.54	442.6	
10	521	11.65	33.9	
11	10,380	75.00	10.9	Upper Marker

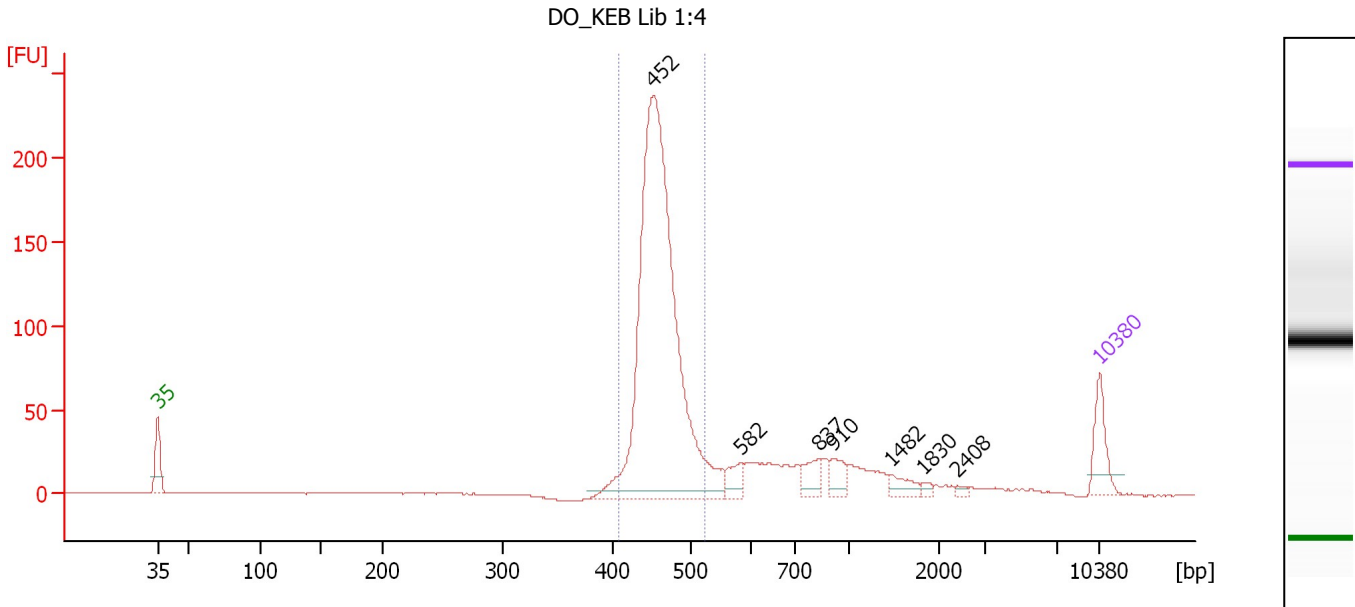
Region table for sample 6 : HL MN 12-45 mRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
237	558	362	7,685.4	1,773.11	641.3	92	16.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : DO_KEB Lib 1:4

Number of peaks found: 7 Corr. Area 1: 847.4
 Noise: 0.2

Peak table for sample 7 : DO_KEB Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	452	1,607.95	5,386.2	
3	582	48.31	125.7	
4	837	54.40	98.4	
5	910	46.14	76.8	
6	1,482	33.50	34.3	
7	1,830	9.87	8.2	
8	2,408	6.52	4.1	
9	10,380	75.00	10.9	Upper Marker

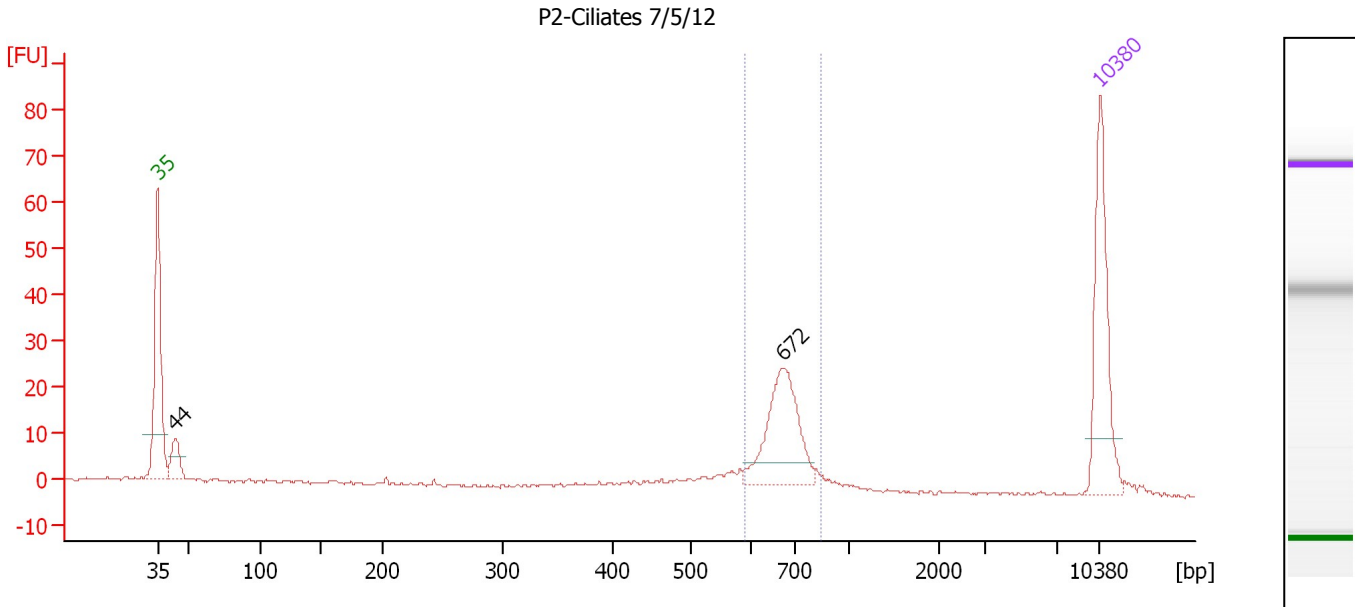
Region table for sample 7 : DO_KEB Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
407	524	459	4,840.6	1,466.33	847.4	72	4.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : P2-Ciliates 7/5/12

Number of peaks found: 2 Corr. Area 1: 85.7
 Noise: 0.4

Peak table for sample 8 : P2-Ciliates 7/5/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	27.95	968.2	
3	672	96.24	216.9	
4	10,380	75.00	10.9	Upper Marker

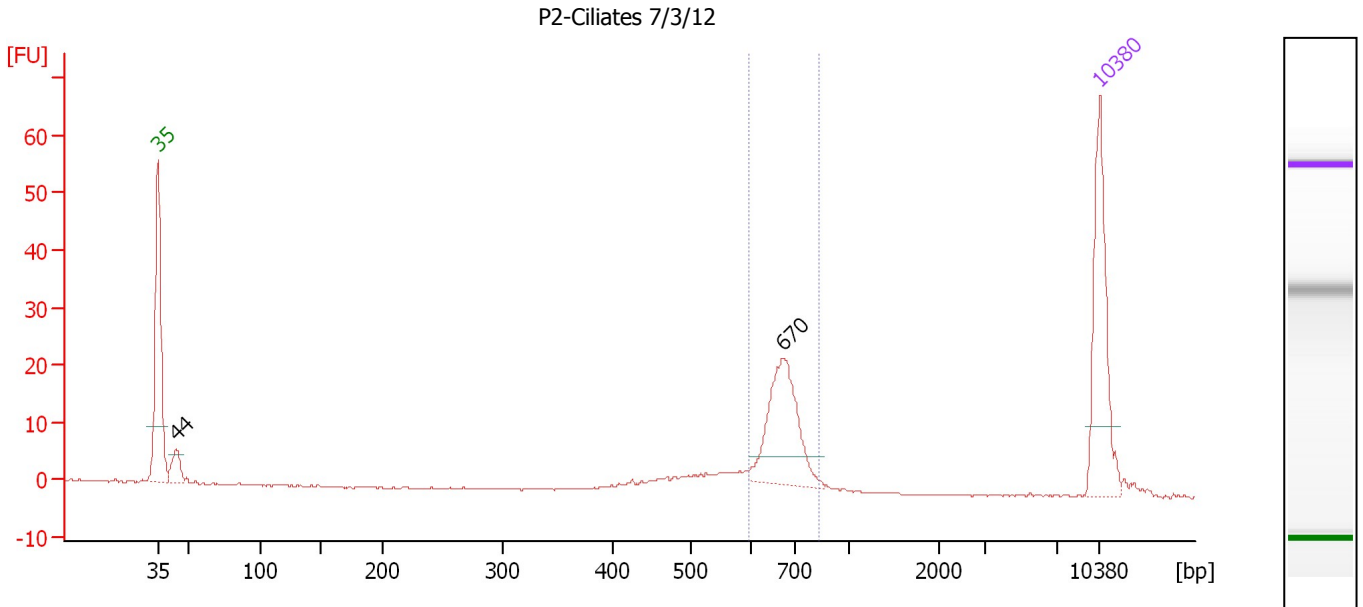
Region table for sample 8 : P2-Ciliates 7/5/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
589	851	679	238.2	106.30	85.7	49	7.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : P2-Ciliates 7/3/12

Number of peaks found: 2 Corr. Area 1: 68.7
 Noise: 0.1

Peak table for sample 9 : P2-Ciliates 7/3/12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	23.08	792.6	
3	670	97.17	219.7	
4	10,380	75.00	10.9	Upper Marker

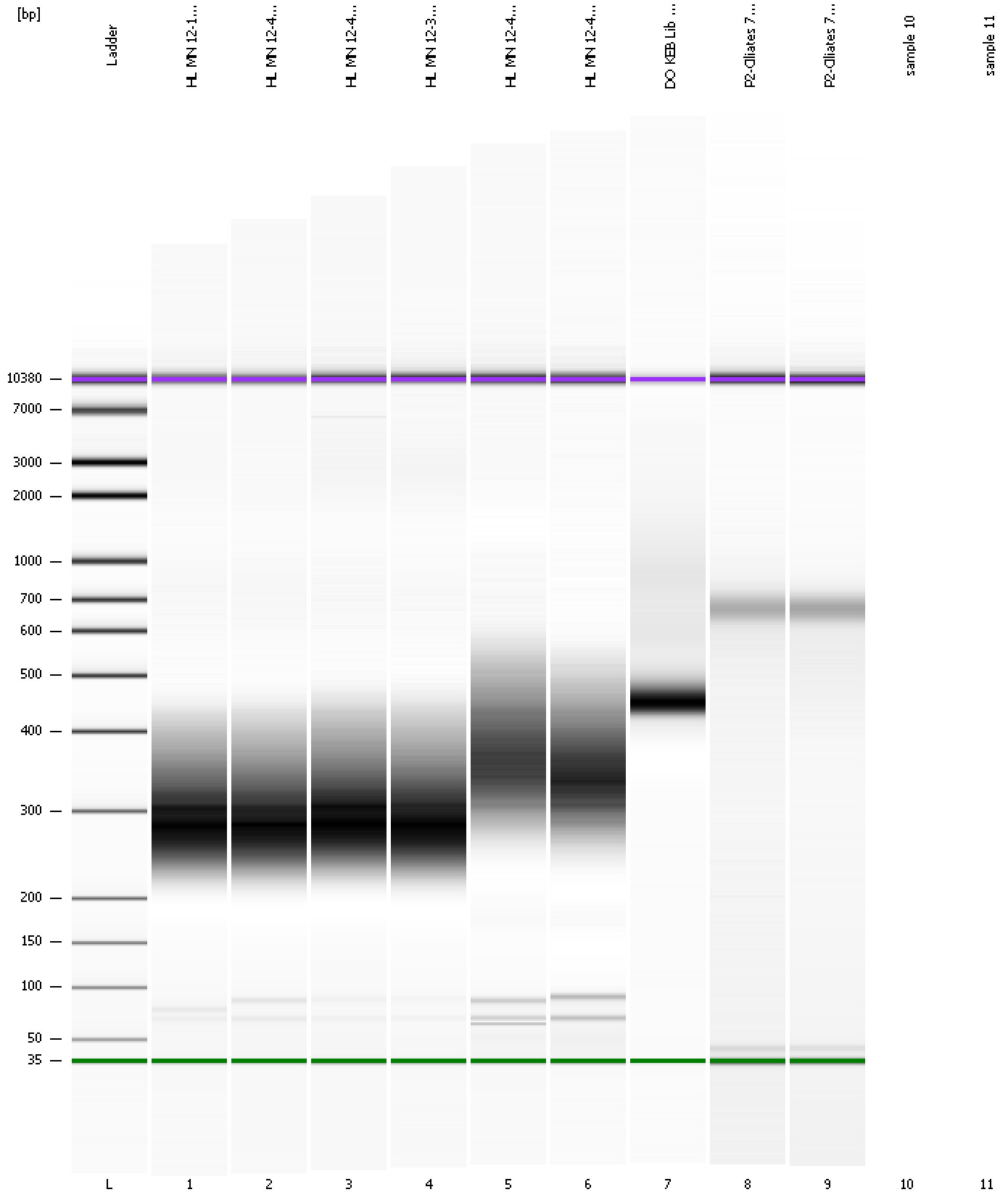
Region table for sample 9 : P2-Ciliates 7/3/12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
594	839	676	235.2	104.63	68.7	65	6.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
Modified: 3/13/2013 4:51:54 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
Modified: 3/13/2013 4:51:54 PM

Invalid Samples

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\2013-03-13\2013-03-13_002.xad

Created: 3/13/2013 4:12:30 PM
 Modified: 3/13/2013 4:51:54 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		3/13/2013 4:48:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-03-13\2013-03-13_002.xad)		Instrument	Run		3/13/2013 4:12:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/13/2013 4:12:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/13/2013 4:12:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/13/2013 4:12:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/13/2013 4:12:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/13/2013 4:12:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/13/2013 4:12:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1