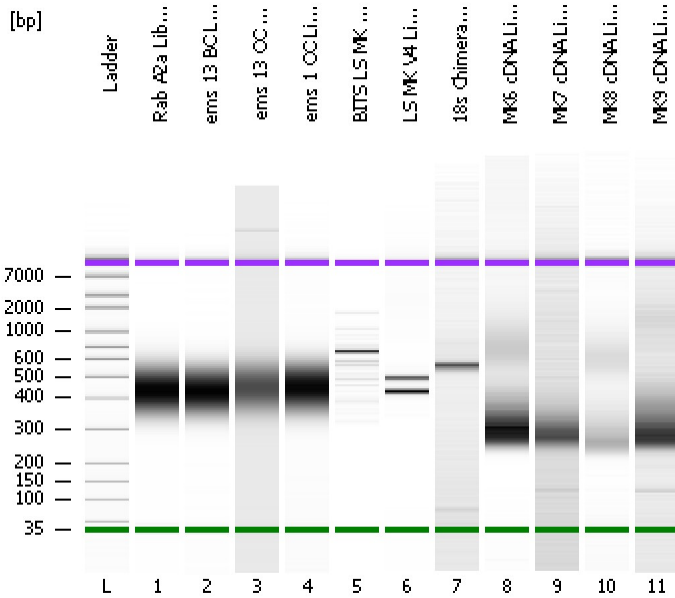


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
Modified: 7/8/2013 12:59:27 PM

Electrophoresis File Run Summary



Instrument Information:

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

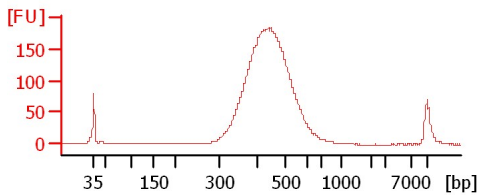
Assay Information:

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

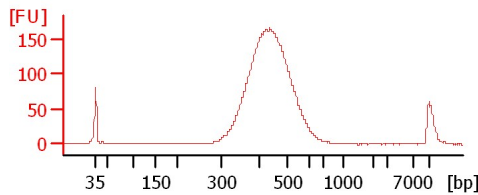
Chip Information:

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

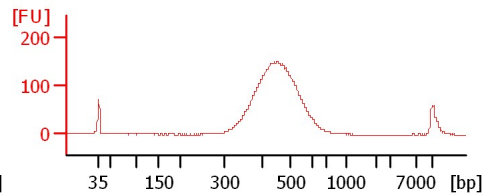
Rab A2a Lib 1:2



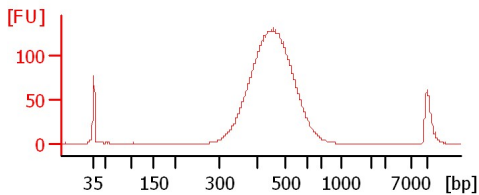
ems 13 BC Lib 1:2



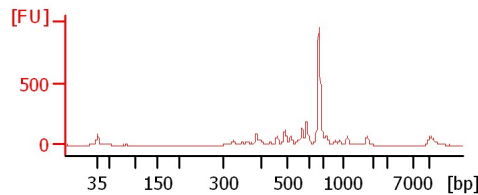
ems 13 OC Lib 1:2



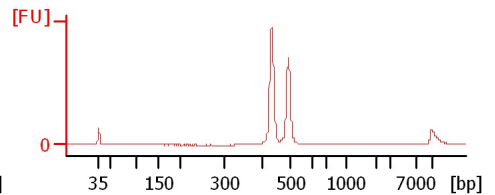
ems 1 OC Lib 1:4



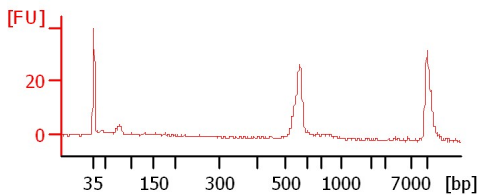
BITS LS MK Lib



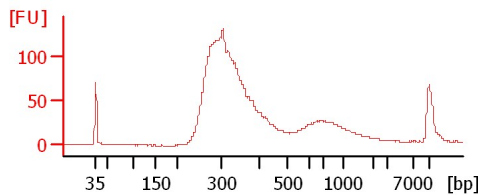
LS MK V4 Lib 1:33



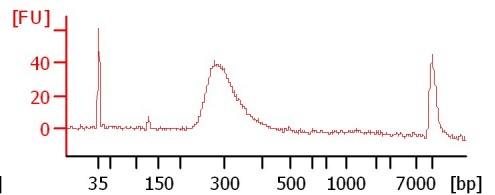
18s Chimera Lib



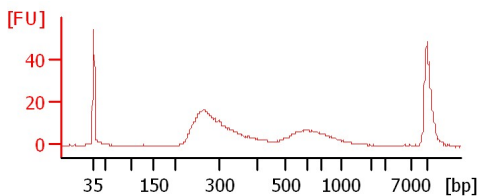
MK6 cDNA Lib 1:8



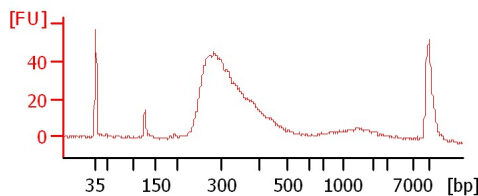
MK7 cDNA Lib 1:8



MK8 cDNA Lib 1:8



MK9 cDNA Lib 1:8



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Rab A2a Lib 1:2		<input type="checkbox"/>	✓			
ems 13 BC Lib 1:2		<input type="checkbox"/>	✓			
ems 13 OC Lib 1:2		<input type="checkbox"/>	✓			
ems 1 OC Lib 1:4		<input type="checkbox"/>	✓			
BITS LS MK Lib		<input type="checkbox"/>	✓			
LS MK V4 Lib 1:33		<input type="checkbox"/>	✓			
18s Chimera Lib		<input type="checkbox"/>	✓			
MK6 cDNA Lib 1:8		<input type="checkbox"/>	✓			
MK7 cDNA Lib 1:8		<input type="checkbox"/>	✓			
MK8 cDNA Lib 1:8		<input type="checkbox"/>	✓			
MK9 cDNA Lib 1:8		<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\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
Modified: 7/8/2013 12:59:27 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

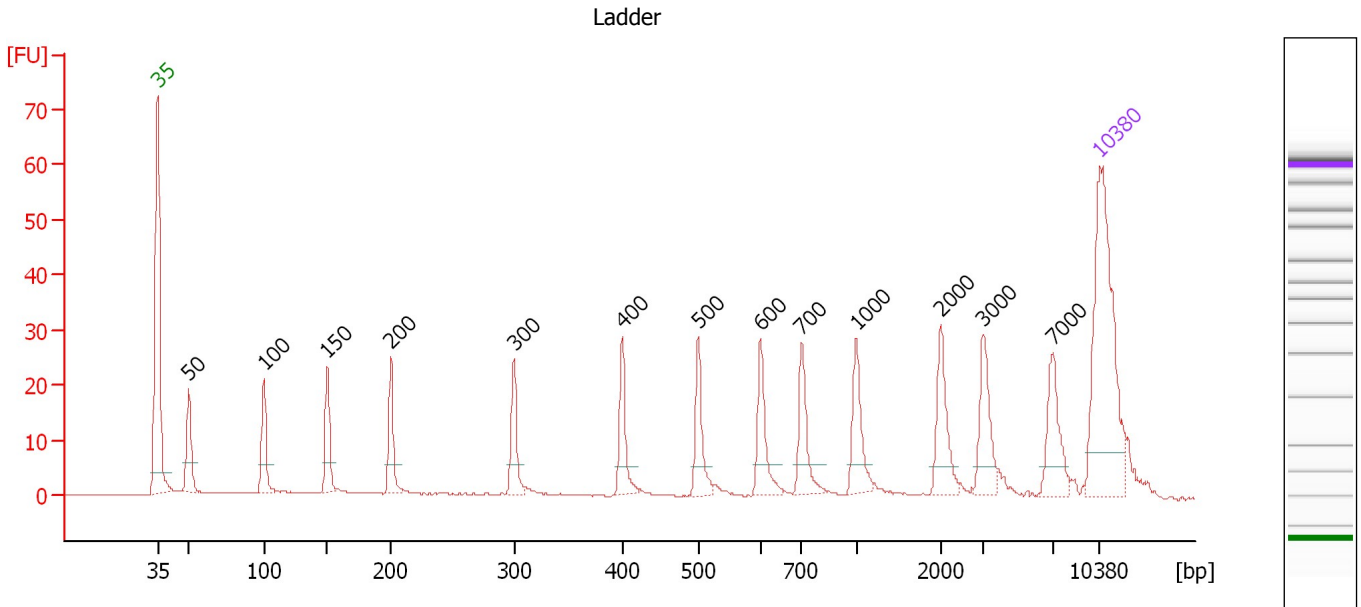
Ladder

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\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

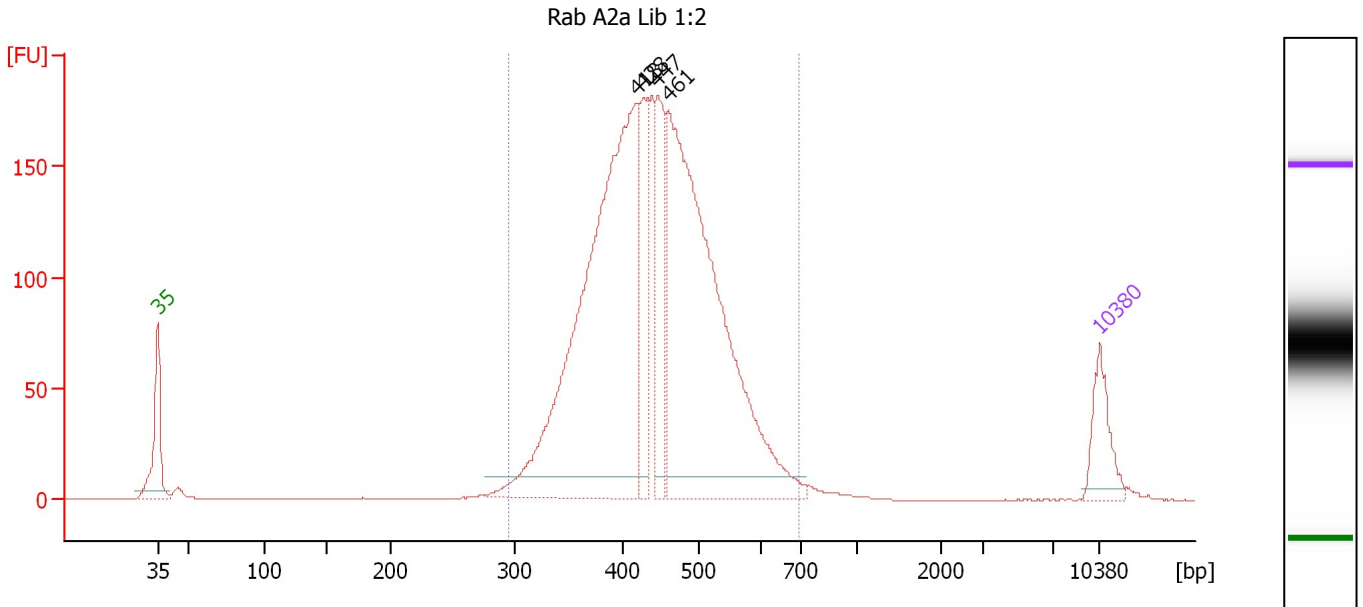
Peak table for Ladder

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\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : Rab A2a Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 1 : Rab A2a Lib 1:2

Number of peaks found: 4 Corr. Area 1: 2,518.7
 Noise: 0.1

Peak table for sample 1 : Rab A2a Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	418	1,281.92	4,641.1	
3	428	169.50	599.5	
4	447	204.11	692.6	
5	461	1,169.99	3,842.2	
6	10,380	75.00	10.9	Upper Marker

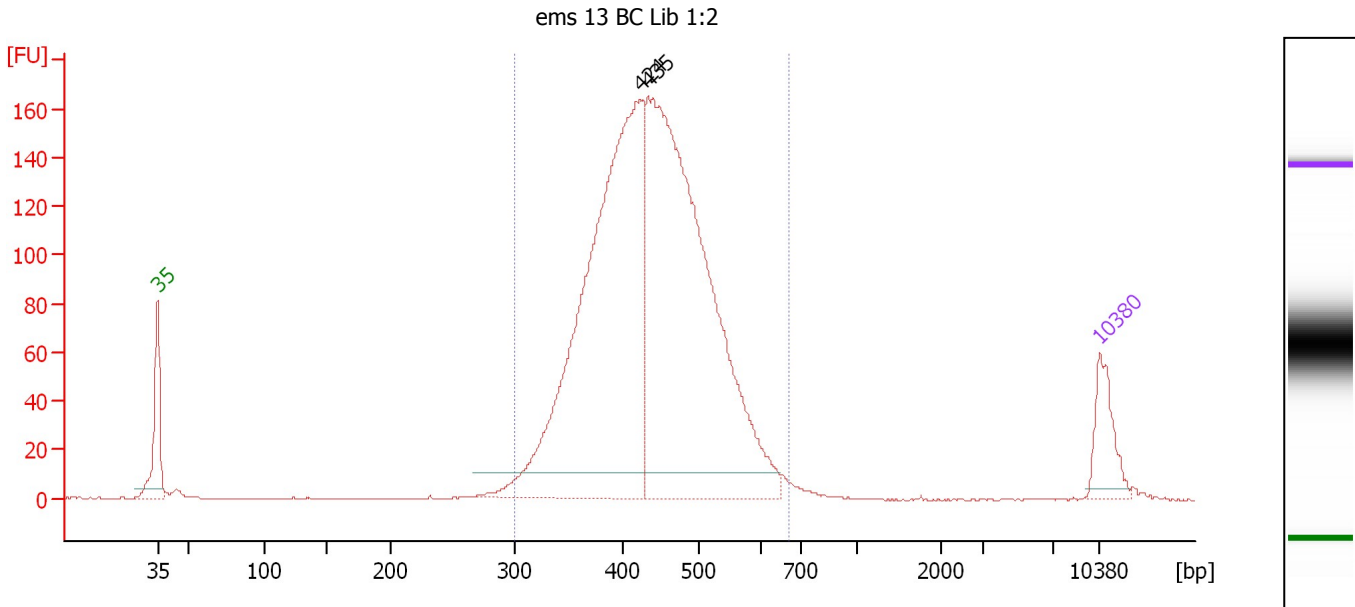
Region table for sample 1 : Rab A2a Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
296	696	445	10,664.9	3,035.59	2,518.7	97	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : ems 13 BC Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 2 : ems 13 BC Lib 1:2

Number of peaks found: 2 Corr. Area 1: 2,186.1
 Noise: 0.2

Peak table for sample 2 : ems 13 BC Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	424	1,309.29	4,678.2	
3	435	1,422.69	4,956.4	
4	10,380	75.00	10.9	Upper Marker

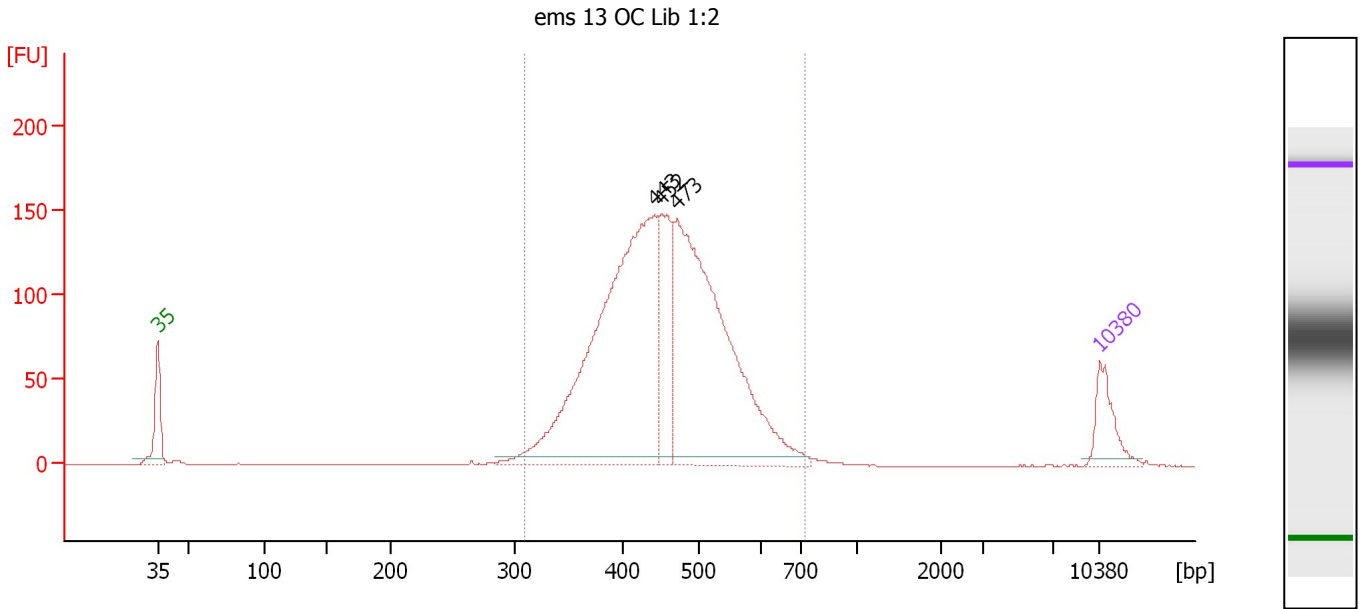
Region table for sample 2 : ems 13 BC Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
300	668	441	9,734.6	2,755.13	2,186.1	98	15.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : ems 13 OC Lib 1:2

Number of peaks found: 3 Corr. Area 1: 2,001.7
 Noise: 0.1

Peak table for sample 3 : ems 13 OC Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	443	1,202.57	4,114.2	
3	452	241.09	807.8	
4	473	1,012.17	3,245.6	
5	10,380	75.00	10.9	Upper Marker

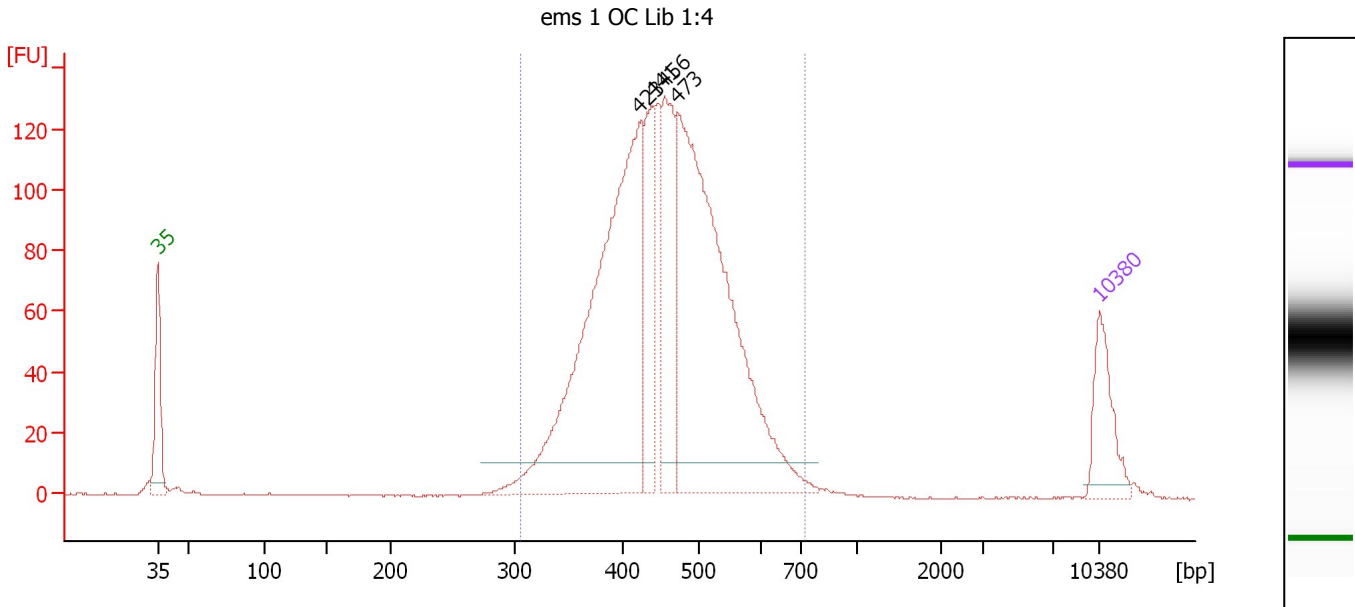
Region table for sample 3 : ems 13 OC Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
310	723	458	8,447.5	2,472.90	2,001.7	95	15.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : ems 1 OC Lib 1:4

Height Threshold [FU] : 10

Overall Results for sample 4 : ems 1 OC Lib 1:4

Number of peaks found: 4 Corr. Area 1: 1,761.0
 Noise: 0.2

Peak table for sample 4 : ems 1 OC Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	423	833.01	2,985.4	
3	441	174.50	599.8	
4	456	223.98	743.8	
5	473	850.52	2,726.6	
6	10,380	75.00	10.9	Upper Marker

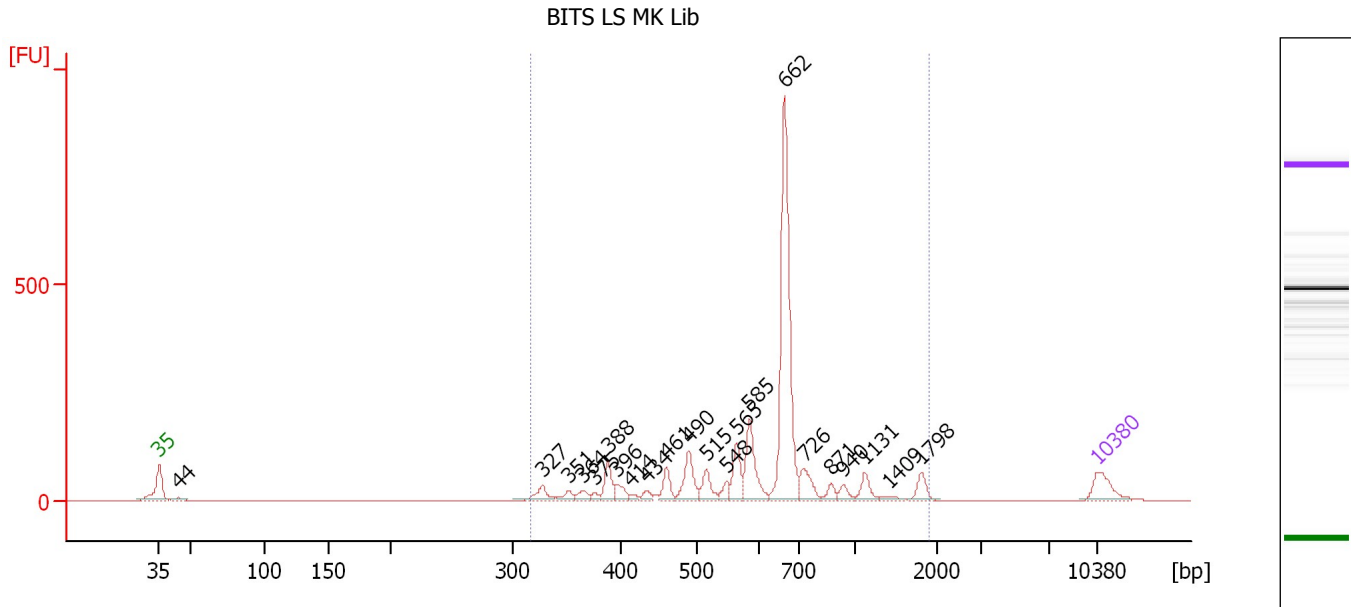
Region table for sample 4 : ems 1 OC Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
306	717	458	7,522.4	2,201.11	1,761.0	97	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : BITS LS MK Lib

Number of peaks found: 22 Corr. Area 1: 1,865.3
 Noise: 0.2

Peak table for sample 5 : BITS LS MK Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	44	14.87	509.0	
3	327	57.38	265.6	
4	351	29.37	126.7	
5	364	31.51	131.1	
6	375	16.37	66.1	
7	388	81.58	318.4	
8	396	45.03	172.2	
9	414	13.07	47.9	
10	434	22.59	78.9	
11	461	62.75	206.3	
12	490	125.82	389.3	
13	515	69.24	203.7	
14	548	34.36	95.0	
15	565	102.76	275.5	
16	585	175.64	454.6	
17	662	789.83	1,808.8	
18	726	84.68	176.7	
19	871	28.21	49.1	
20	940	27.87	44.9	
21	1,131	50.18	67.2	
22	1,409	12.04	13.0	
23	1,798	43.10	36.3	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...

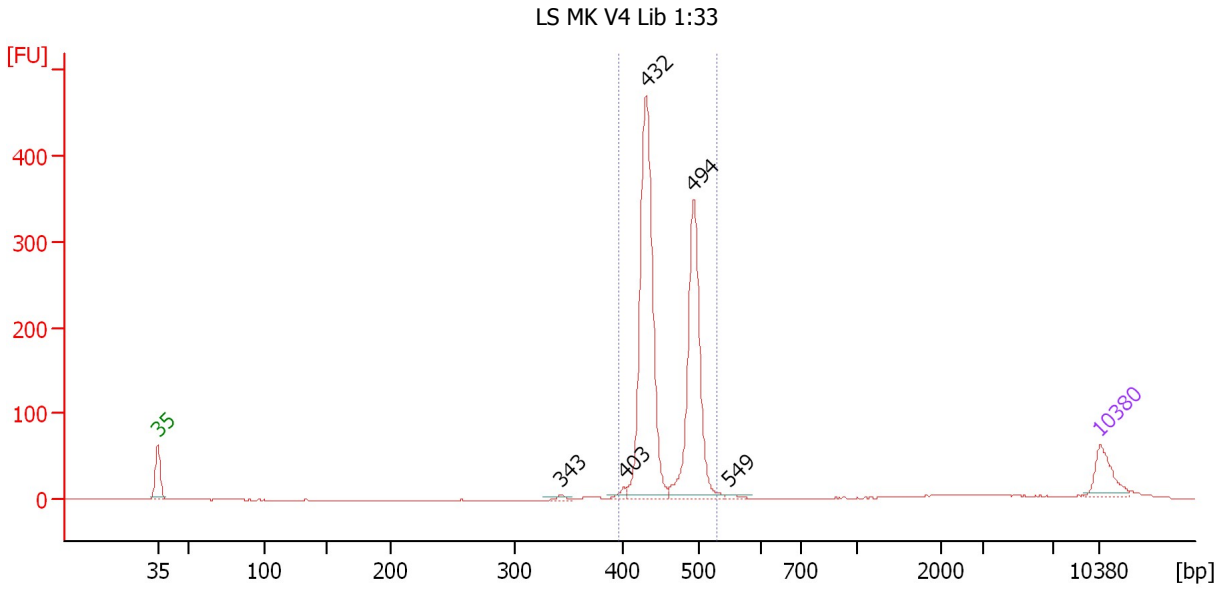
... Region table for sample 5 : BITS LS MK Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
316	1,898	664	5,059.4	1,930.81	1,865.3	98	40.5	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : LS MK V4 Lib 1:33

Number of peaks found: 5 Corr. Area 1: 1,127.2
 Noise: 0.1

Peak table for sample 6 : LS MK V4 Lib 1:33

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	343	9.55	42.1	
3	403	18.12	68.2	
4	432	877.22	3,076.6	
5	494	601.24	1,844.5	
6	549	7.72	21.3	
7	10,380	75.00	10.9	Upper Marker

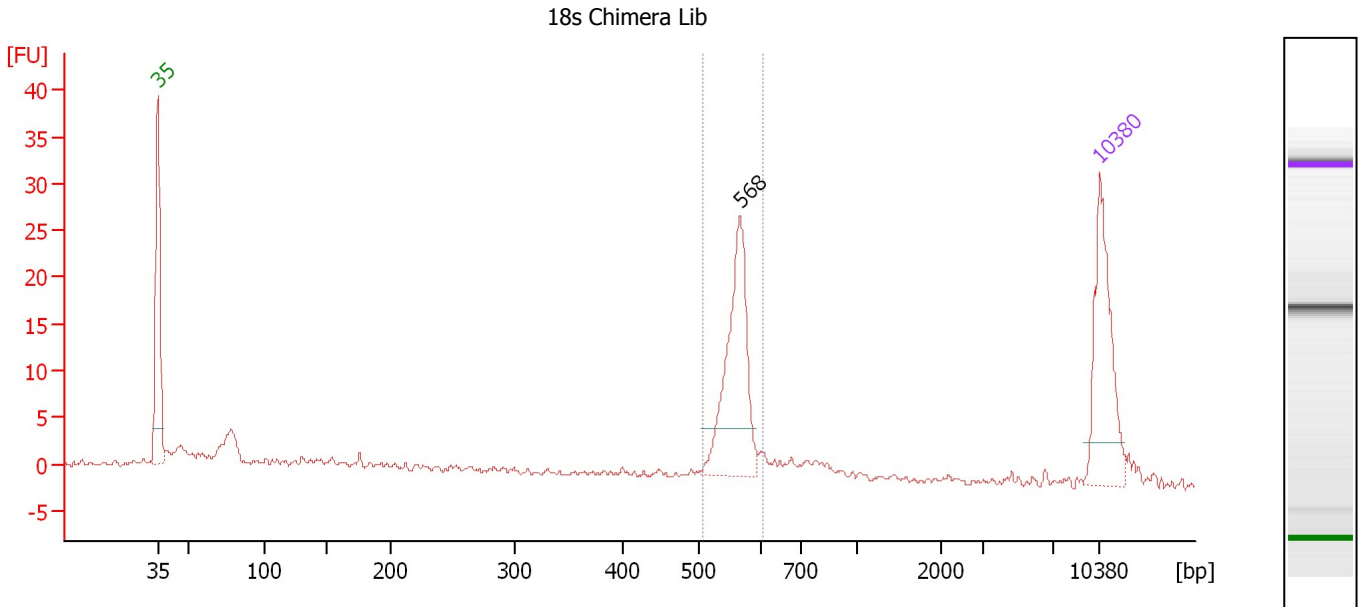
Region table for sample 6 : LS MK V4 Lib 1:33

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
396	529	458	4,967.6	1,499.28	1,127.2	86	7.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 18s Chimera Lib

Number of peaks found: 1 Corr. Area 1: 57.7
 Noise: 0.3

Peak table for sample 7 : 18s Chimera Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	568	131.65	351.5	
3	10,380	75.00	10.9	Upper Marker

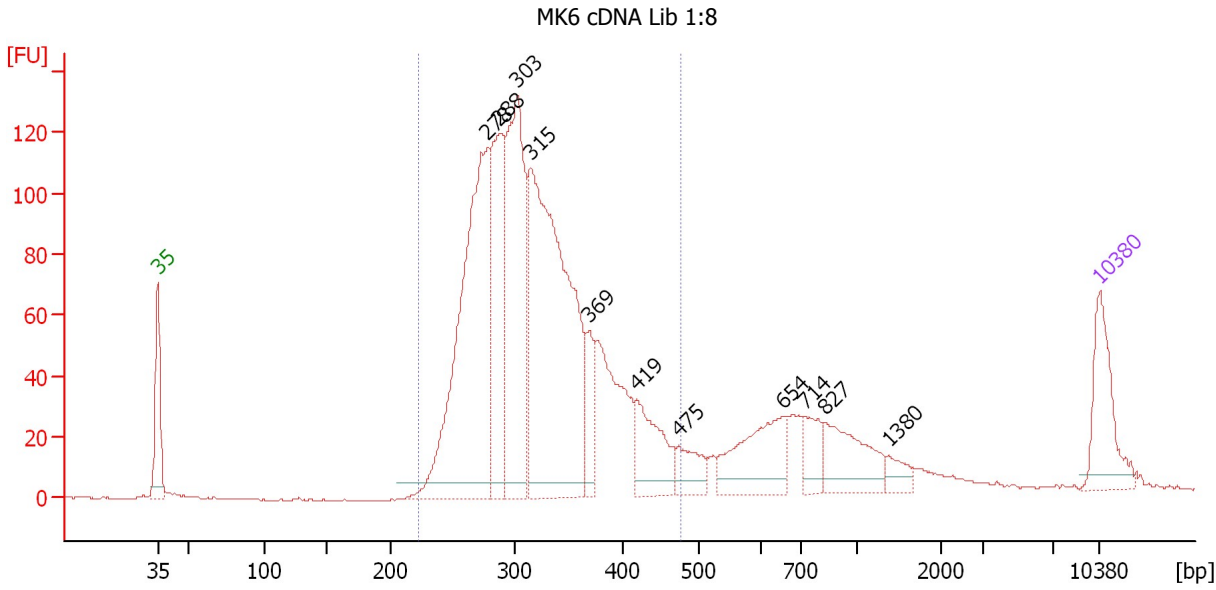
Region table for sample 7 : 18s Chimera Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
509	605	560	379.9	140.48	57.7	39	3.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : MK6 cDNA Lib 1:8

Number of peaks found: 11 Corr. Area 1: 1,680.6
 Noise: 0.2

Peak table for sample 8 : MK6 cDNA Lib 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	278	568.54	3,096.7	
3	288	244.70	1,286.2	
4	303	369.60	1,850.6	
5	315	649.25	3,119.2	
6	369	56.55	232.2	
7	419	99.27	358.6	
8	475	46.29	147.8	
9	654	119.85	277.5	
10	714	40.66	86.3	
11	827	92.54	169.5	
12	1,380	19.97	21.9	
13	10,380	75.00	10.9	Upper Marker

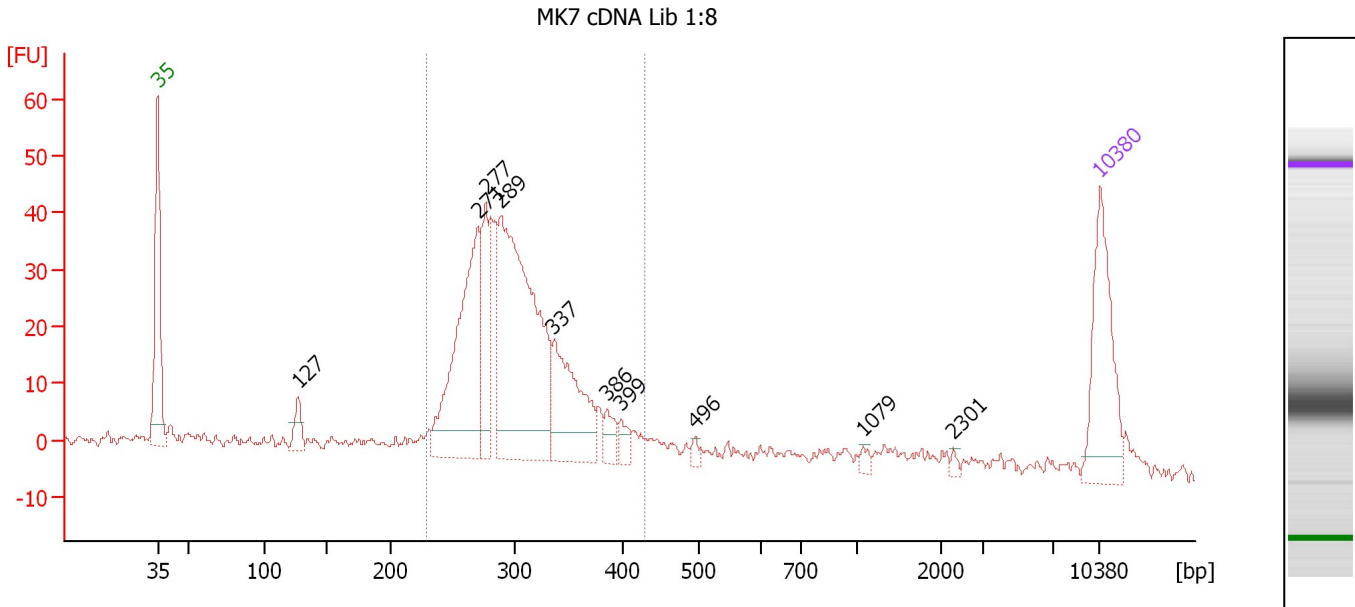
Region table for sample 8 : MK6 cDNA Lib 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	478	321	10,454.2	2,148.09	1,680.6	81	16.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : MK7 cDNA Lib 1:8

Number of peaks found: 10 Corr. Area 1: 490.3
 Noise: 0.9

Peak table for sample 9 : MK7 cDNA Lib 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	127	20.45	243.9	
3	271	202.06	1,130.1	
4	277	70.11	383.3	
5	289	312.86	1,640.6	
6	337	105.66	475.3	
7	386	16.37	64.2	
8	399	12.45	47.3	
9	496	5.93	18.1	
10	1,079	4.45	6.2	
11	2,301	2.80	1.8	
12	10,380	75.00	10.9	Upper Marker

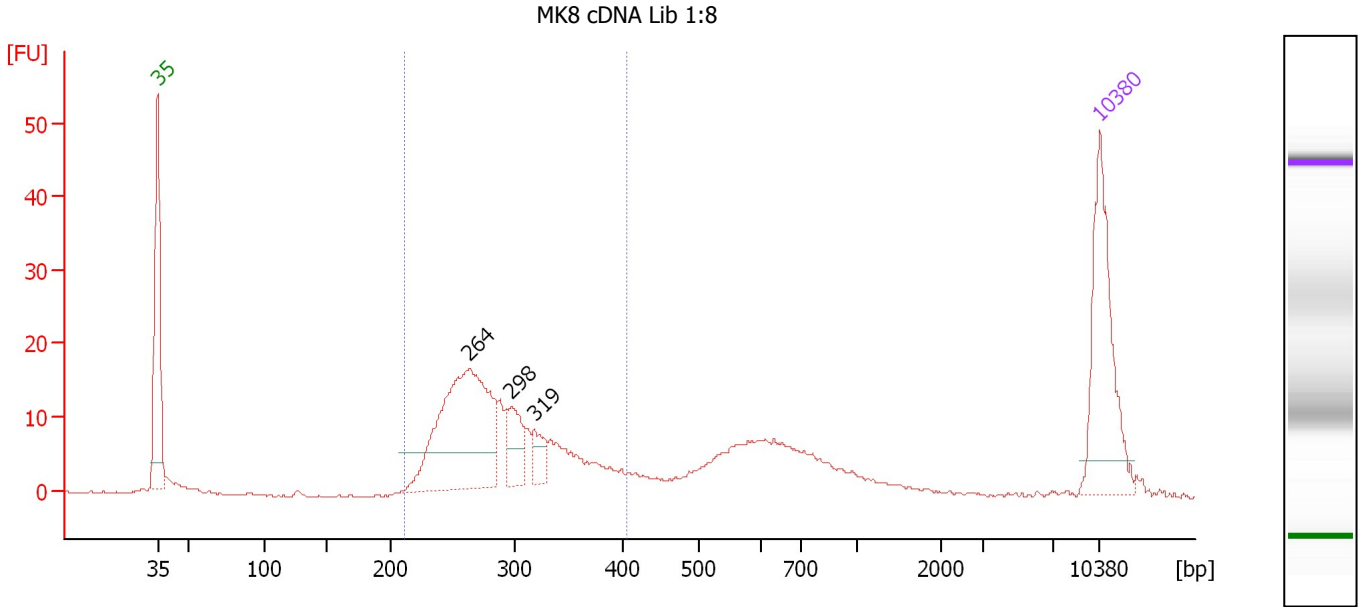
Region table for sample 9 : MK7 cDNA Lib 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
229	430	305	4,058.4	799.22	490.3	66	13.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : MK8 cDNA Lib 1:8

Number of peaks found: 3 Corr. Area 1: 196.6
 Noise: 0.1

Peak table for sample 10 : MK8 cDNA Lib 1:8

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	190.87	1,096.4	
3	298	33.65	171.2	
4	319	16.65	79.1	
5	10,380	75.00	10.9	Upper Marker

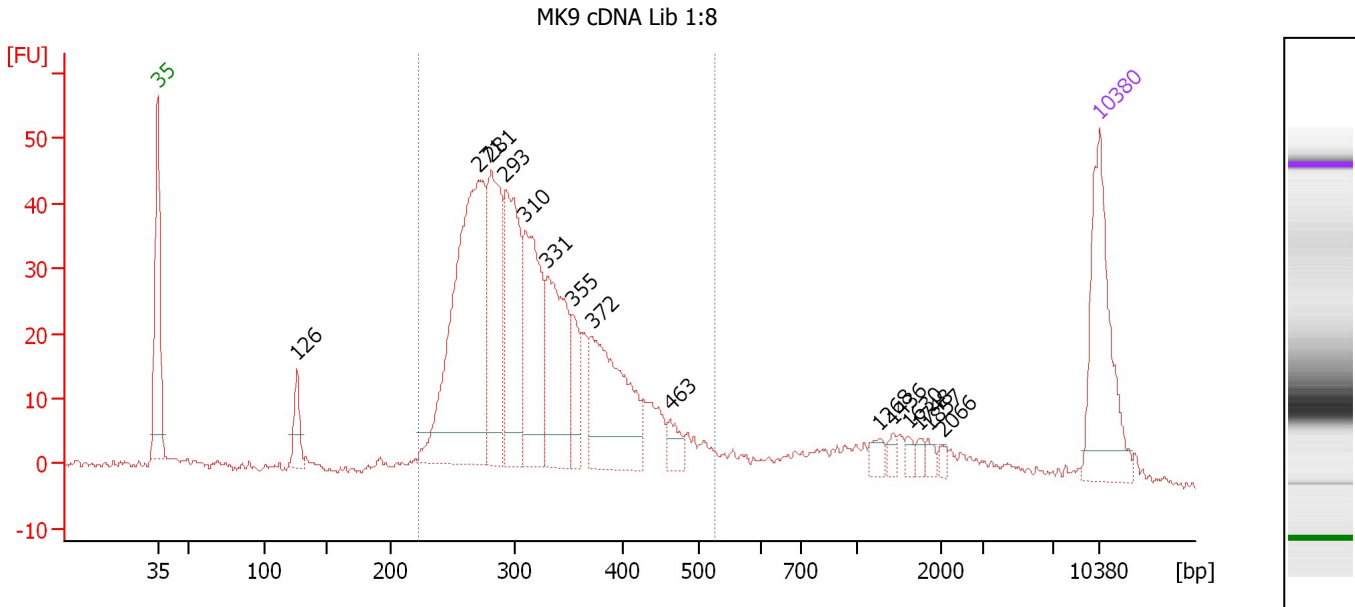
Region table for sample 10 : MK8 cDNA Lib 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
210	405	291	1,834.3	343.27	196.6	66	14.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : MK9 cDNA Lib 1:8

Number of peaks found: 15 Corr. Area 1: 688.7
 Noise: 0.6

Peak table for sample 11 : MK9 cDNA Lib 1:8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	126	25.80	309.9	
3	271	291.74	1,630.0	
4	281	120.60	649.2	
5	293	126.05	651.9	
6	310	116.66	569.8	
7	331	103.23	472.4	
8	355	29.57	126.4	
9	372	113.91	463.8	
10	463	13.96	45.7	
11	1,268	7.69	9.2	
12	1,436	4.59	4.8	
13	1,630	4.55	4.2	
14	1,748	4.32	3.7	
15	1,857	4.58	3.7	
16	2,066	3.26	2.4	
17	10,380	75.00	10.9	Upper Marker

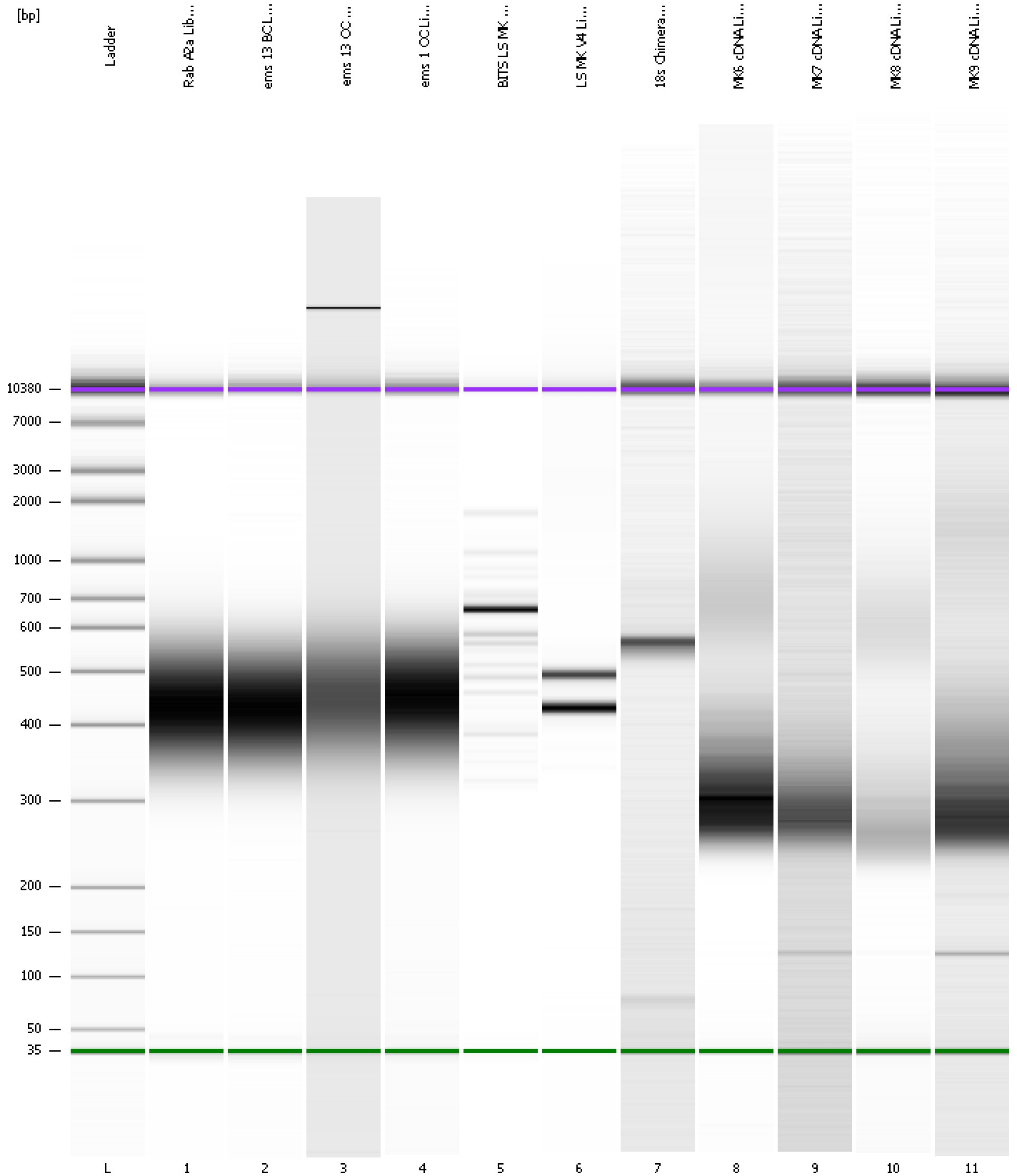
Region table for sample 11 : MK9 cDNA Lib 1:8

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	526	325	5,161.1	1,056.89	688.7	79	19.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
Modified: 7/8/2013 12:59:27 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad

Created: 7/8/2013 12:18:02 PM
 Modified: 7/8/2013 12:59:27 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		7/8/2013 12:58:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-07-08\2013-07-08_004.xad)		Instrument	Run		7/8/2013 12:18:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/8/2013 12:18:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/8/2013 12:18:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/8/2013 12:18:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/8/2013 12:18:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/8/2013 12:18:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/8/2013 12:18:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1