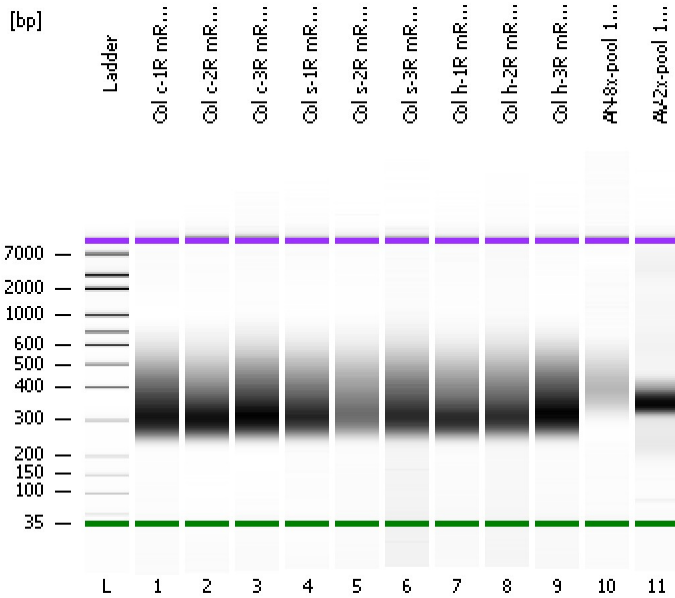


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
Modified: 5/17/2013 4:46:17 PM

Electrophoresis File Run Summary



Instrument Information:

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

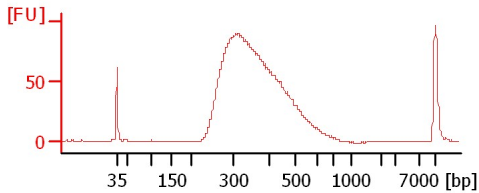
Assay Information:

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

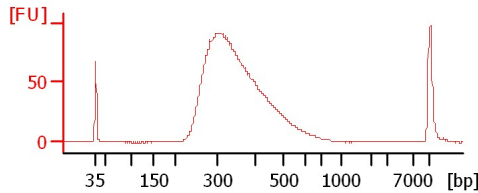
Chip Information:

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

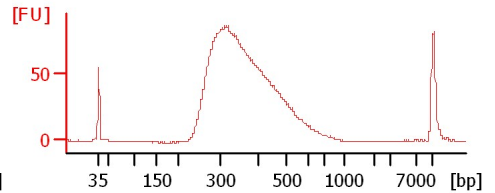
Col c-1R mRNA Lib 1:3



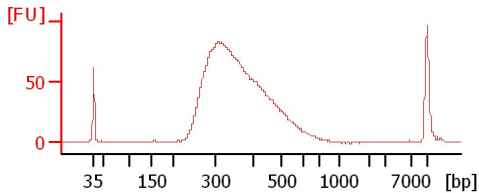
Col c-2R mRNA Lib 1:5



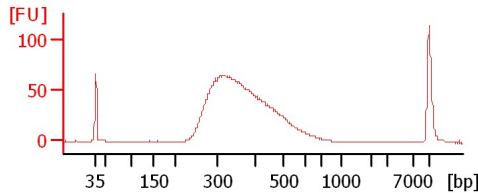
Col c-3R mRNA Lib 1:2



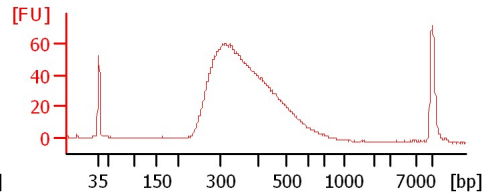
Col s-1R mRNA Lib 1:2



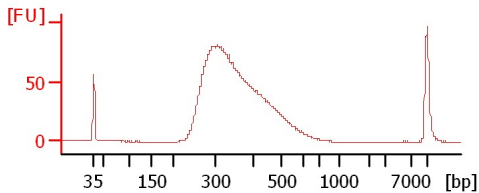
Col s-2R mRNA Lib 1:4



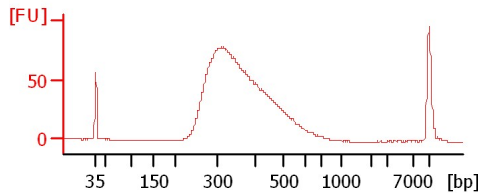
Col s-3R mRNA Lib 1:3



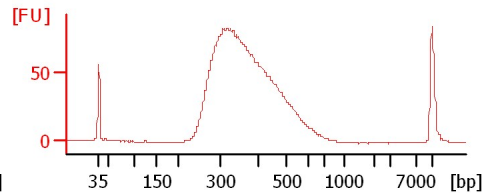
Col h-1R mRNA Lib 1:3



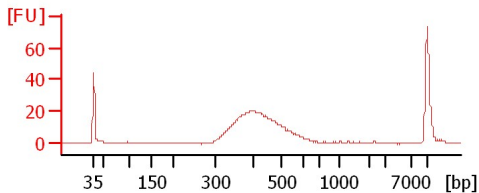
Col h-2R mRNA Lib 1:3



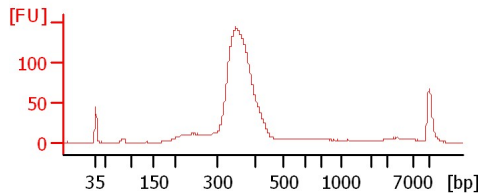
Col h-3R mRNA Lib 1:2



AN-8x-pool 1:10



AV-2x-pool 1:10



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Col c-1R mRNA Lib 1:3		<input type="checkbox"/>	✓			
Col c-2R mRNA Lib 1:5		<input type="checkbox"/>	✓			
Col c-3R mRNA Lib 1:2		<input type="checkbox"/>	✓			
Col s-1R mRNA Lib 1:2		<input type="checkbox"/>	✓			
Col s-2R mRNA Lib 1:4		<input type="checkbox"/>	✓			
Col s-3R mRNA Lib 1:3		<input type="checkbox"/>	✓			
Col h-1R mRNA Lib 1:3		<input type="checkbox"/>	✓			
Col h-2R mRNA Lib 1:3		<input type="checkbox"/>	✓			
Col h-3R mRNA Lib 1:2		<input type="checkbox"/>	✓			
AN-8x-pool 1:10		<input type="checkbox"/>	✓			
AV-2x-pool 1:10		<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\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
Modified: 5/17/2013 4:46:17 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

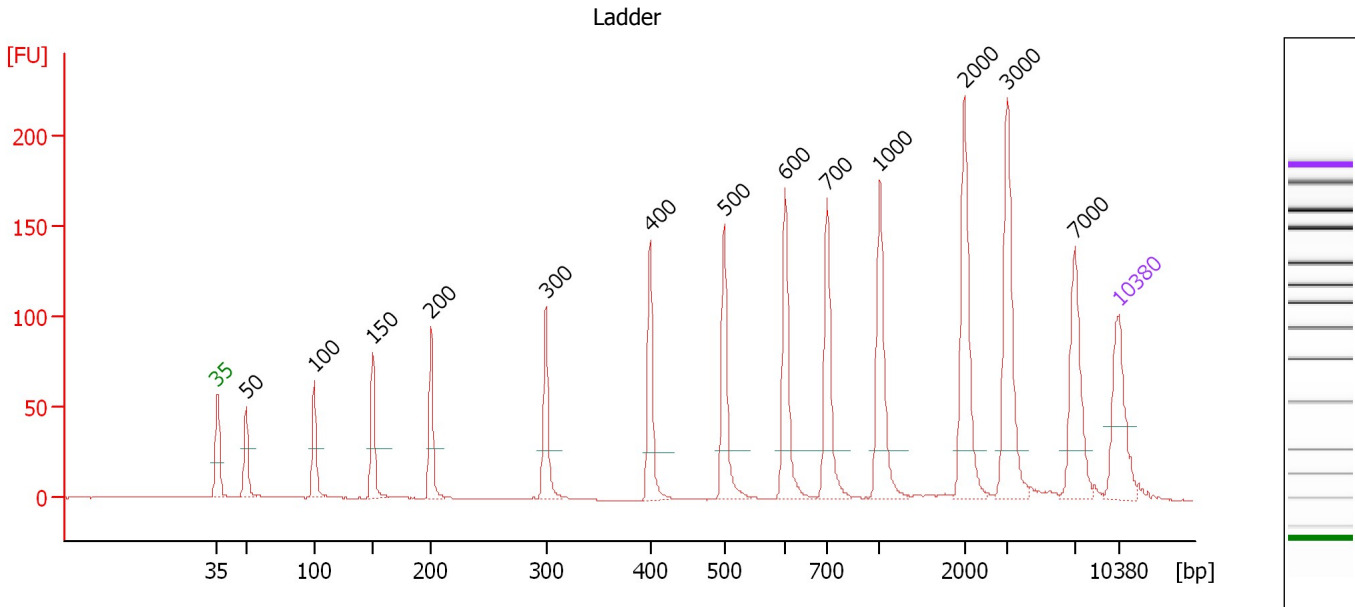
Ladder

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\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

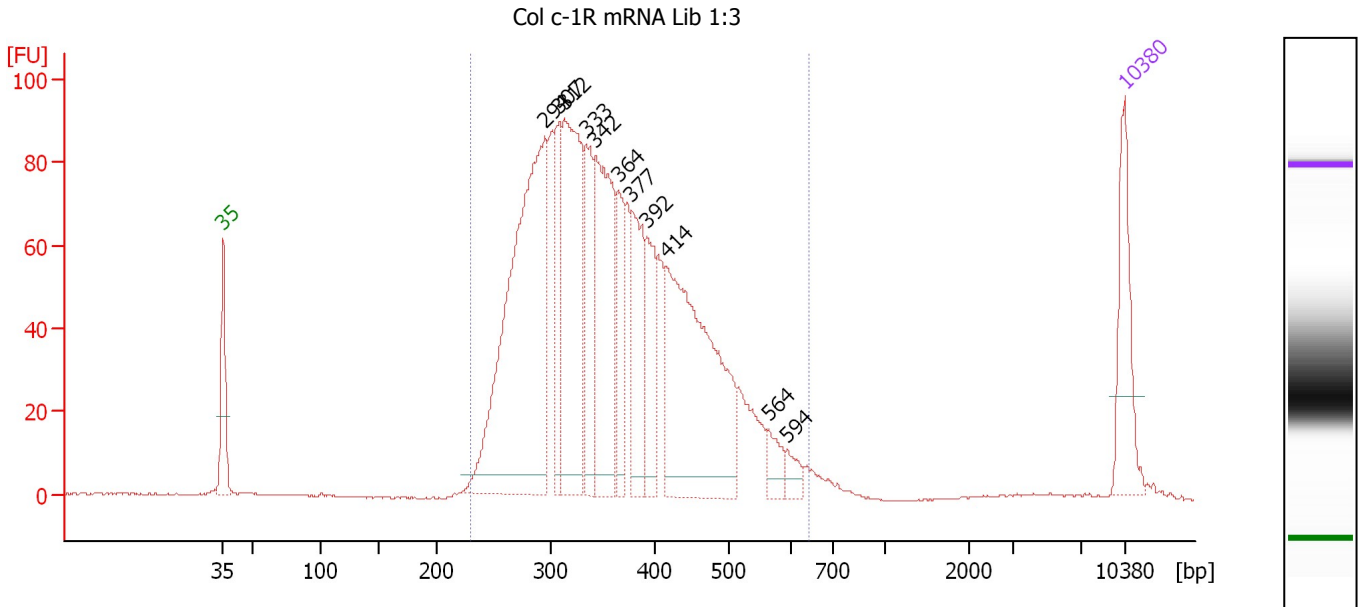
Peak table for Ladder

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\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Col c-1R mRNA Lib 1:3

Number of peaks found: 11 Corr. Area 1: 1,892.3
 Noise: 0.2

Peak table for sample 1 : Col c-1R mRNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	294	600.15	3,096.2	
3	307	104.49	515.1	
4	312	305.61	1,484.2	
5	333	117.92	536.5	
6	342	245.77	1,088.0	
7	364	84.70	352.8	
8	377	121.39	487.7	
9	392	91.24	352.6	
10	414	375.44	1,374.0	
11	564	27.07	72.7	
12	594	17.56	44.8	
13	10,380	75.00	10.9	Upper Marker

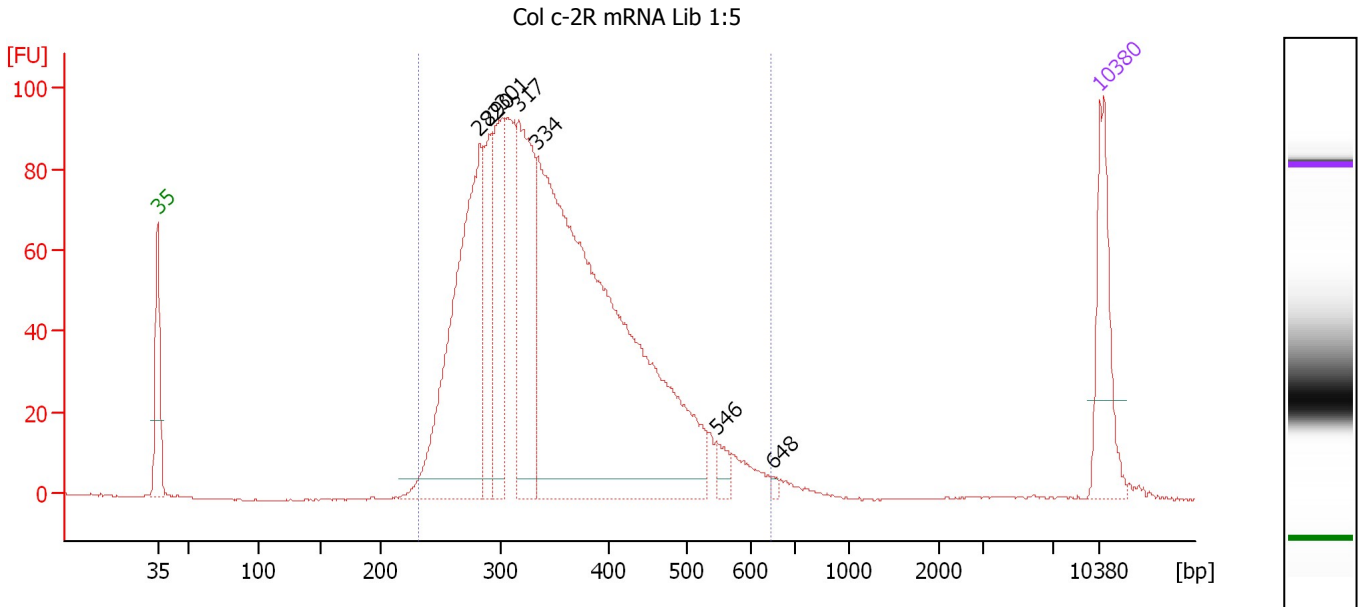
Region table for sample 1 : Col c-1R mRNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	644	365	10,563.0	2,381.04	1,892.3	98	22.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Col c-2R mRNA Lib 1:5

Number of peaks found: 7 Corr. Area 1: 1,743.9
 Noise: 0.2

Peak table for sample 2 : Col c-2R mRNA Lib 1:5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	282	410.13	2,202.3	
3	290	112.32	586.2	
4	301	157.35	790.8	
5	317	232.31	1,110.9	
6	334	974.43	4,422.5	
7	546	17.13	47.6	
8	648	3.53	8.2	
9	10,380	75.00	10.9	Upper Marker

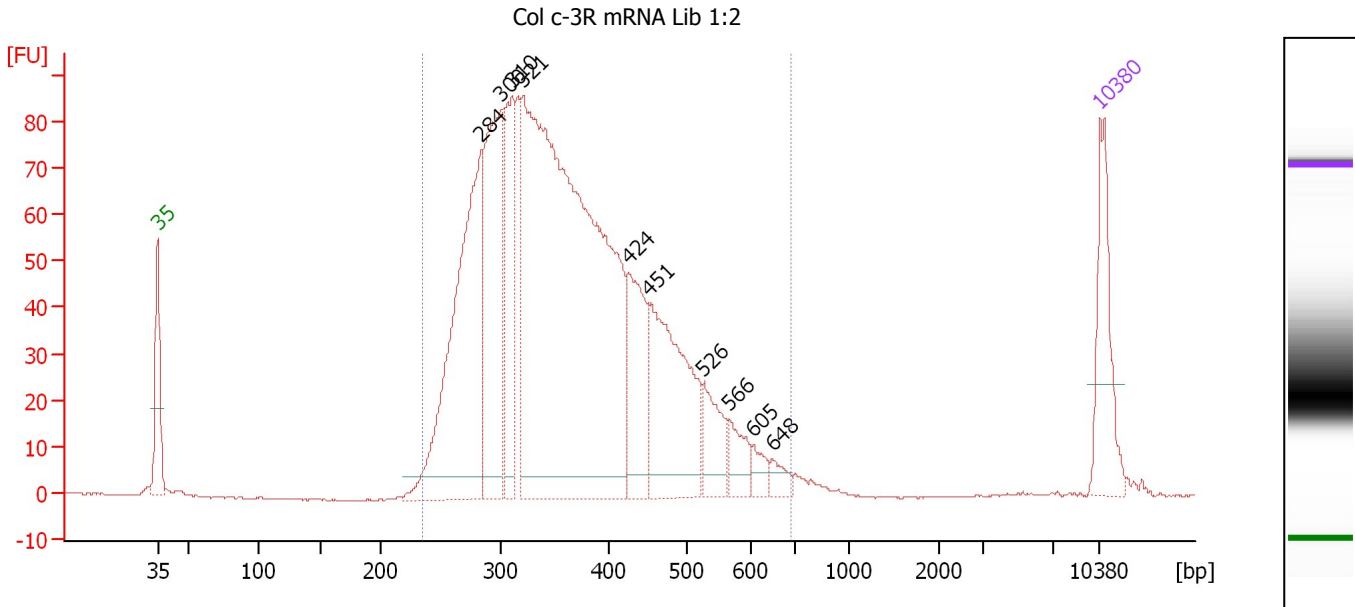
Region table for sample 2 : Col c-2R mRNA Lib 1:5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	644	355	8,918.8	1,966.70	1,743.9	98	22.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Col c-3R mRNA Lib 1:2

Number of peaks found: 10 Corr. Area 1: 1,731.8
 Noise: 0.2

Peak table for sample 3 : Col c-3R mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	423.60	2,259.9	
3	300	267.69	1,352.9	
4	310	154.10	752.7	
5	321	1,105.19	5,223.4	
6	424	123.77	441.8	
7	451	217.84	731.3	
8	526	56.87	163.9	
9	566	32.36	86.6	
10	605	17.13	42.9	
11	648	14.91	34.8	
12	10,380	75.00	10.9	Upper Marker

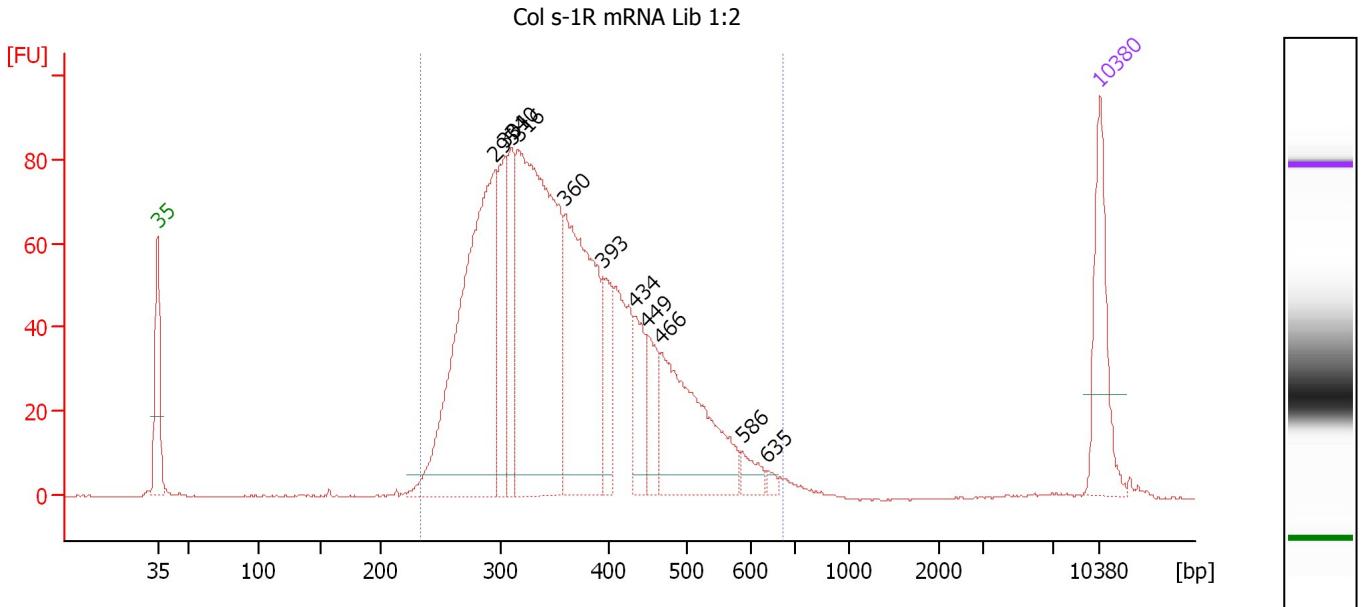
Region table for sample 3 : Col c-3R mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
235	689	370	10,427.4	2,373.96	1,731.8	98	23.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Col s-1R mRNA Lib 1:2

Number of peaks found: 11 Corr. Area 1: 1,607.4
 Noise: 0.2

Peak table for sample 4 : Col s-1R mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	476.05	2,442.7	
3	304	120.55	601.2	
4	310	93.64	457.7	
5	316	509.06	2,443.6	
6	360	292.34	1,231.7	
7	393	70.00	269.6	
8	434	56.59	197.8	
9	449	52.05	175.8	
10	466	193.34	628.7	
11	586	17.99	46.5	
12	635	5.90	14.1	
13	10,380	75.00	10.9	Upper Marker

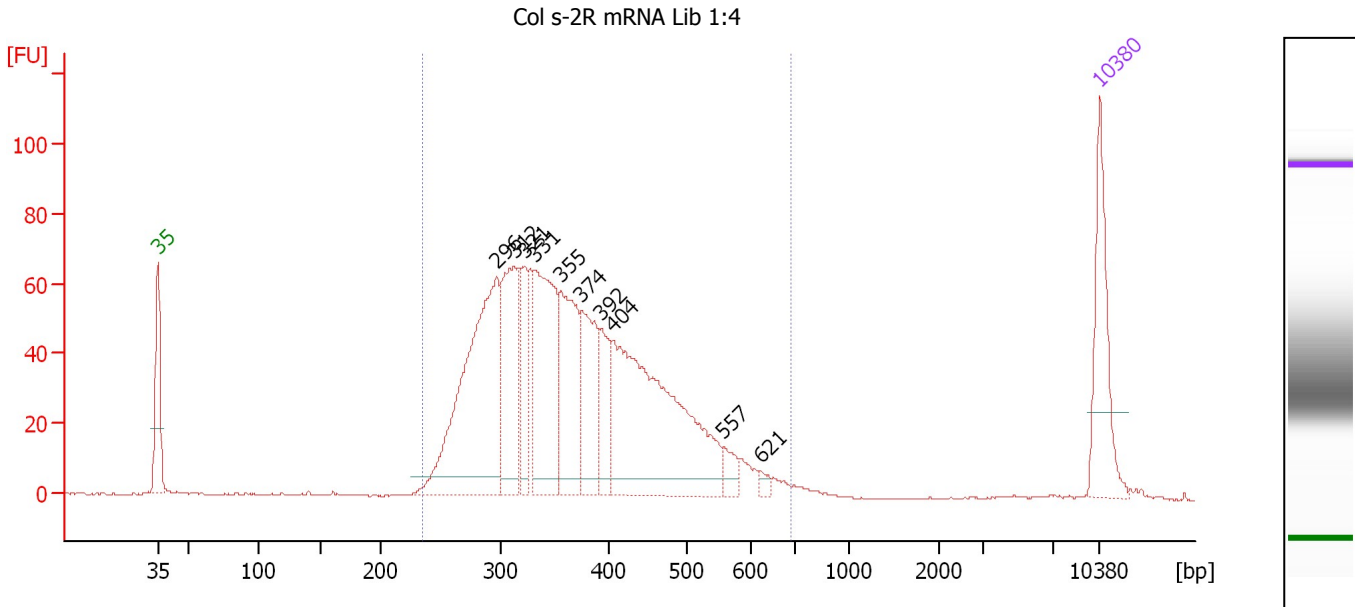
Region table for sample 4 : Col s-1R mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
234	674	367	8,727.3	1,979.64	1,607.4	98	22.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Col s-2R mRNA Lib 1:4

Number of peaks found: 10 Corr. Area 1: 1,329.8
 Noise: 0.2

Peak table for sample 5 : Col s-2R mRNA Lib 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	296	330.77	1,691.1	
3	312	141.70	687.7	
4	321	75.31	354.9	
5	331	181.87	833.2	
6	355	131.13	559.5	
7	374	100.05	405.1	
8	392	54.38	210.1	
9	404	334.40	1,252.6	
10	557	17.55	47.8	
11	621	5.96	14.5	
12	10,380	75.00	10.9	Upper Marker

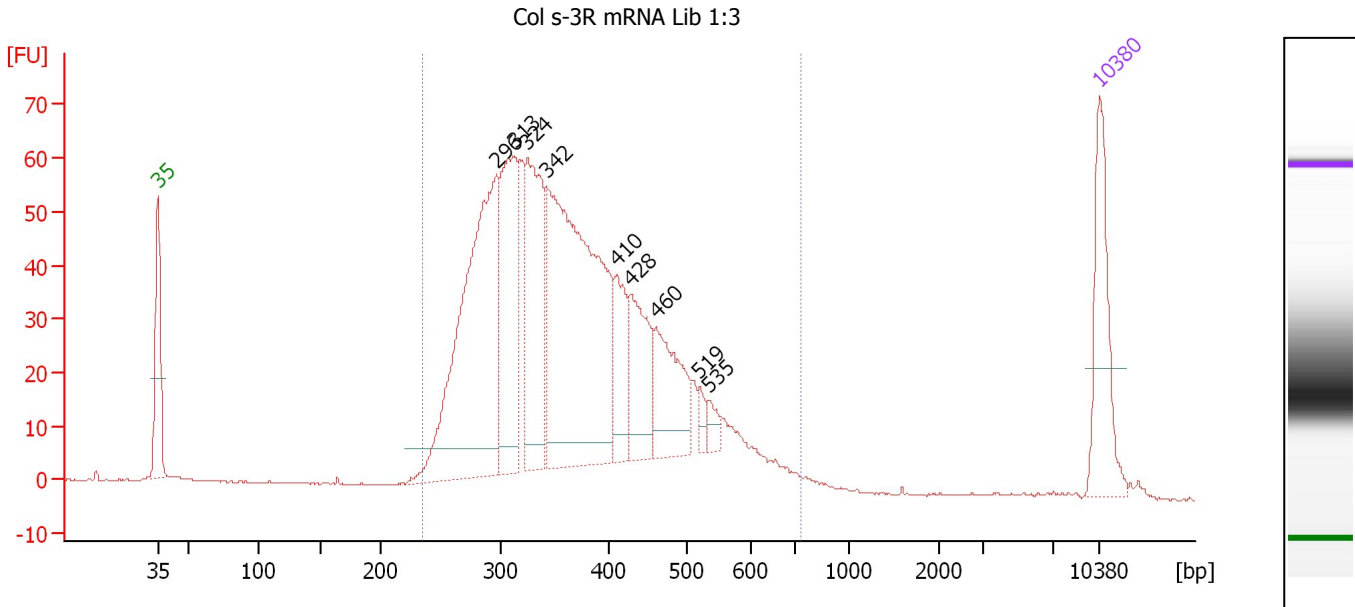
Region table for sample 5 : Col s-2R mRNA Lib 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	690	374	6,253.9	1,446.01	1,329.8	99	22.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Col s-3R mRNA Lib 1:3

Number of peaks found: 9 Corr. Area 1: 1,232.7
 Noise: 0.2

Peak table for sample 6 : Col s-3R mRNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	296	385.19	1,971.9	
3	313	174.37	845.1	
4	324	179.90	840.3	
5	342	443.12	1,962.9	
6	410	61.00	225.7	
7	428	90.00	318.8	
8	460	91.58	301.7	
9	519	10.69	31.2	
10	535	12.49	35.3	
11	10,380	75.00	10.9	Upper Marker

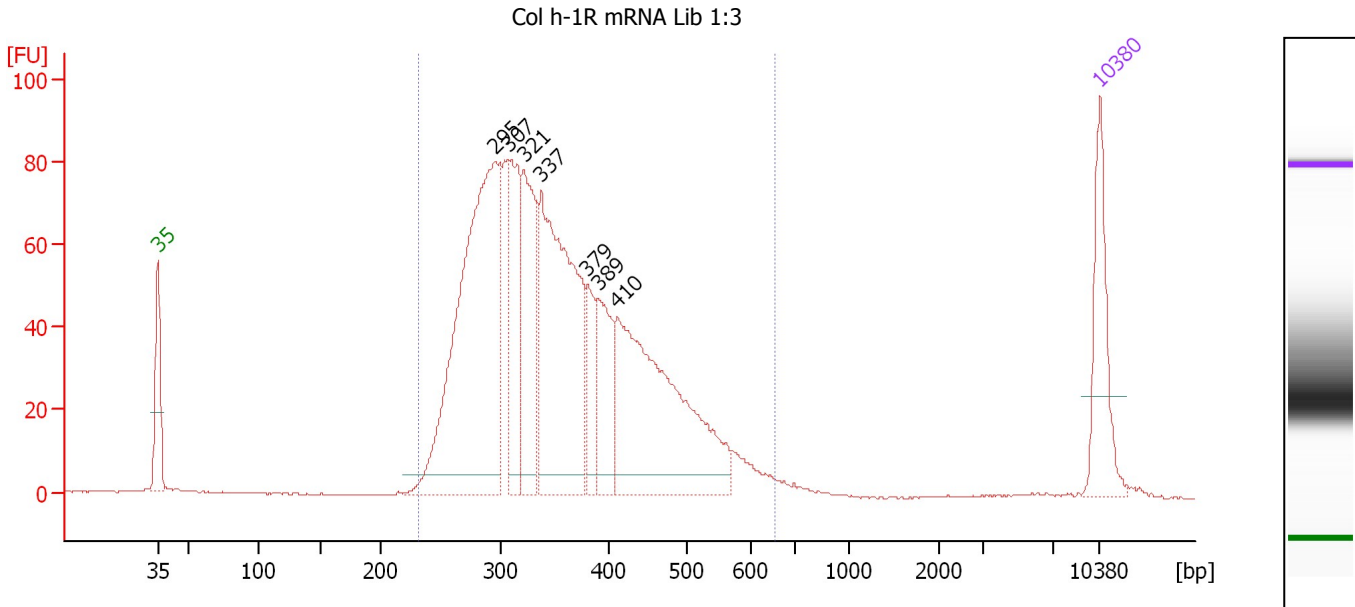
Region table for sample 6 : Col s-3R mRNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	733	374	7,606.5	1,748.25	1,232.7	98	23.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Col h-1R mRNA Lib 1:3

Number of peaks found: 7 Corr. Area 1: 1,504.4
 Noise: 0.2

Peak table for sample 7 : Col h-1R mRNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	542.91	2,784.2	
3	307	144.79	713.6	
4	321	164.50	776.2	
5	337	373.13	1,676.8	
6	379	60.28	240.7	
7	389	94.13	366.2	
8	410	345.41	1,275.7	
9	10,380	75.00	10.9	Upper Marker

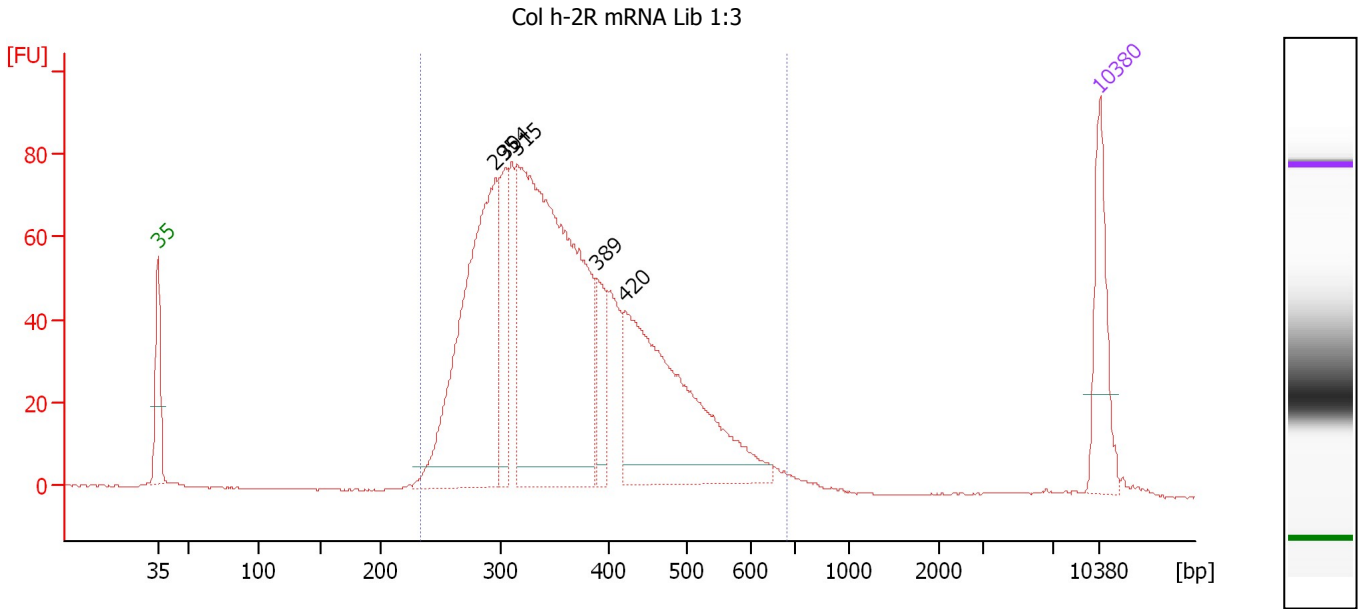
Region table for sample 7 : Col h-1R mRNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
232	655	361	8,293.0	1,851.24	1,504.4	97	22.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Col h-2R mRNA Lib 1:3

Number of peaks found: 5 Corr. Area 1: 1,514.3
 Noise: 0.2

Peak table for sample 8 : Col h-2R mRNA Lib 1:3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	452.93	2,323.7	
3	304	100.69	501.3	
4	315	730.93	3,514.6	
5	389	56.45	219.8	
6	420	361.53	1,304.8	
7	10,380	75.00	10.9	Upper Marker

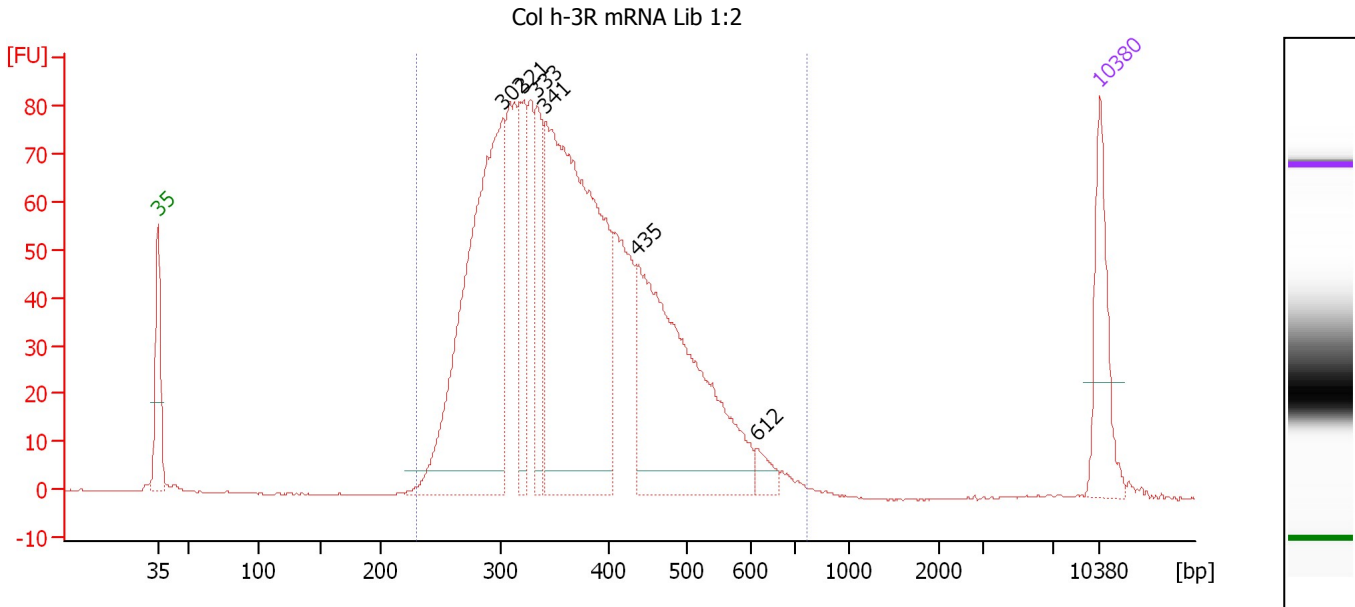
Region table for sample 8 : Col h-2R mRNA Lib 1:3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
234	680	369	8,371.5	1,907.09	1,514.3	97	23.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Col h-3R mRNA Lib 1:2

Number of peaks found: 6 Corr. Area 1: 1,622.1
 Noise: 0.1

Peak table for sample 9 : Col h-3R mRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	302	568.62	2,851.2	
3	321	107.43	507.4	
4	333	101.23	460.1	
5	341	672.40	2,986.1	
6	435	416.51	1,449.6	
7	612	19.07	47.2	
8	10,380	75.00	10.9	Upper Marker

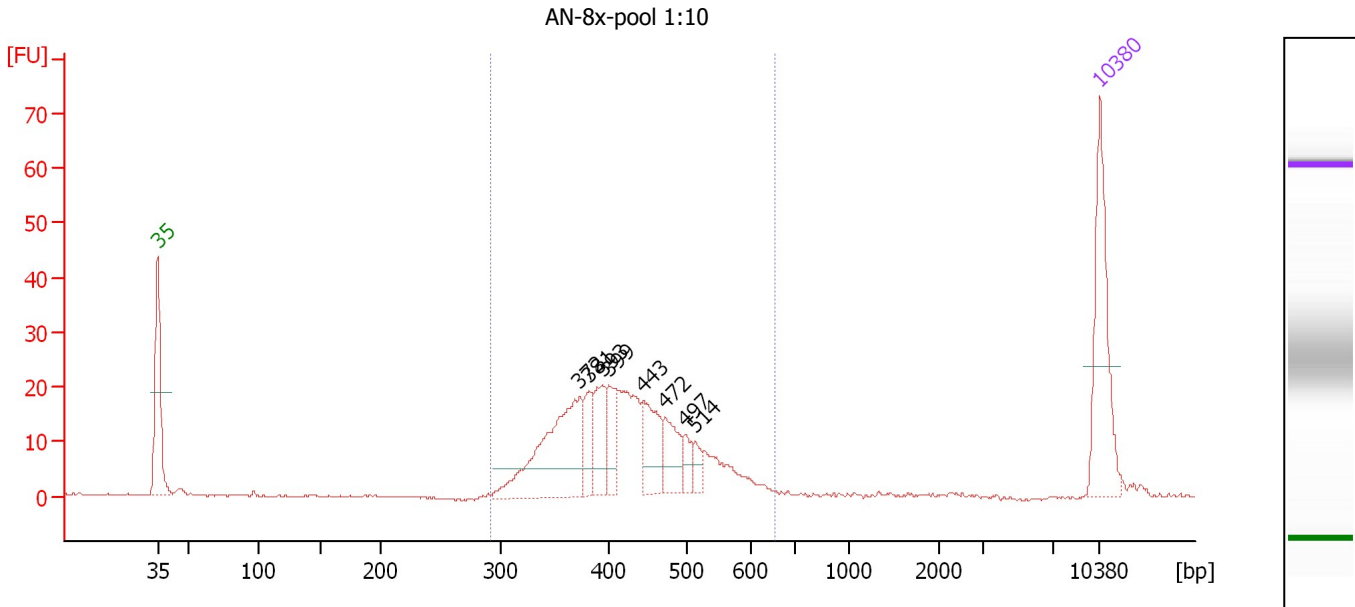
Region table for sample 9 : Col h-3R mRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	766	376	9,761.5	2,263.34	1,622.1	99	23.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : AN-8x-pool 1:10

Number of peaks found: 8 Corr. Area 1: 285.2
 Noise: 0.1

Peak table for sample 10 : AN-8x-pool 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	372	141.26	574.7	
3	381	30.06	119.4	
4	393	39.10	150.8	
5	399	28.52	108.3	
6	443	47.66	162.8	
7	472	33.08	106.1	
8	497	14.22	43.4	
9	514	11.12	32.8	
10	10,380	75.00	10.9	Upper Marker

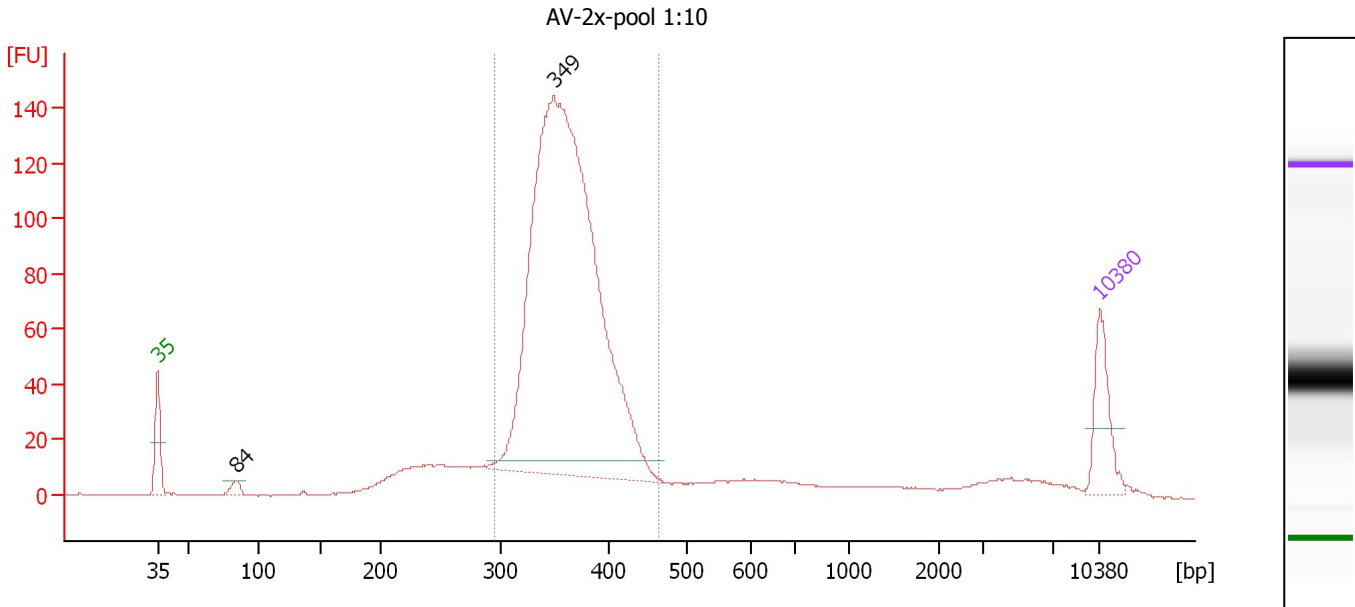
Region table for sample 10 : AN-8x-pool 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
292	654	425	1,710.4	464.69	285.2	97	16.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : AV-2x-pool 1:10

Number of peaks found: 2 Corr. Area 1: 1,185.9
 Noise: 0.1

Peak table for sample 11 : AV-2x-pool 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	84	18.52	332.2	
3	349	1,632.40	7,087.4	
4	10,380	75.00	10.9	Upper Marker

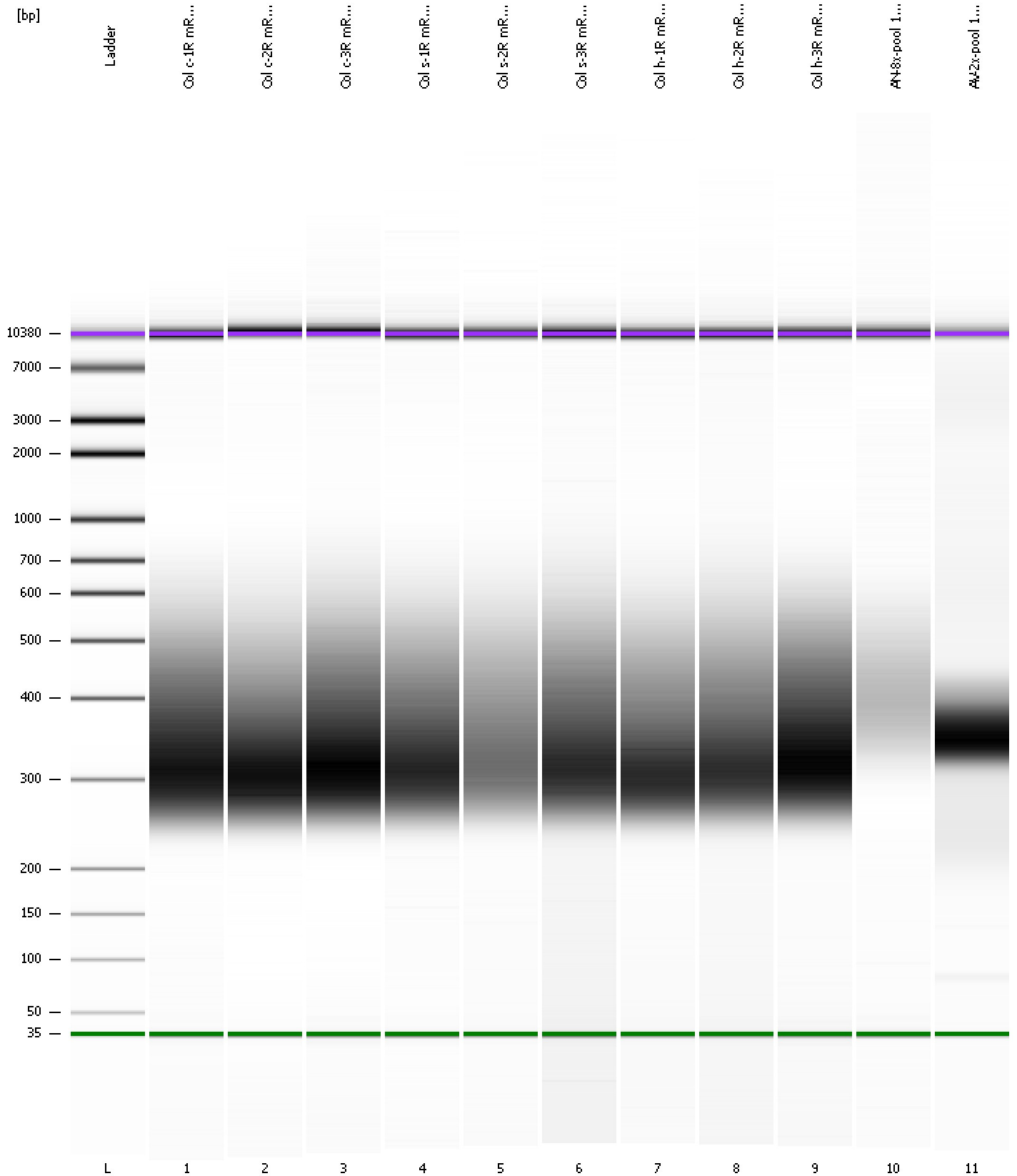
Region table for sample 11 : AV-2x-pool 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
294	464	362	7,504.4	1,784.41	1,185.9	78	8.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
Modified: 5/17/2013 4:46:17 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad

Created: 5/17/2013 3:57:39 PM
 Modified: 5/17/2013 4:46:17 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		5/17/2013 4:38:58 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-17\2013-05-17_001.xad)		Instrument	Run		5/17/2013 3:57:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/17/2013 3:57:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/17/2013 3:57:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/17/2013 3:57:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/17/2013 3:57:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/17/2013 3:57:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/17/2013 3:57:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1