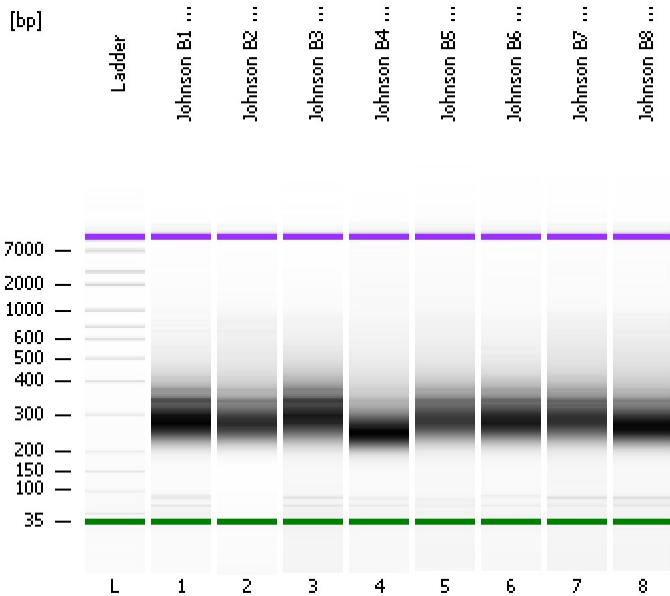


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
Modified: 5/8/2013 5:35:25 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

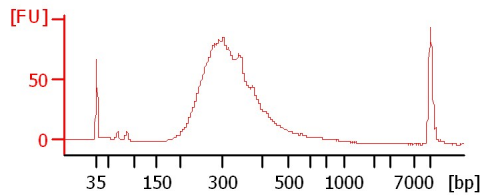
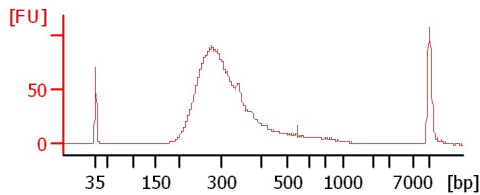
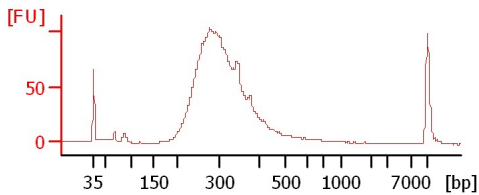
Chip Information:

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

**Johnson B1 mRNA Lib 1:3**

**Johnson B2 mRNA Lib 1:5**

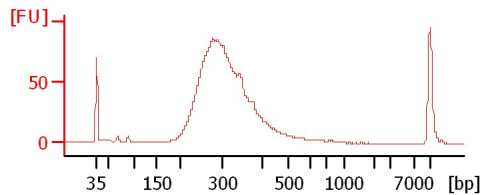
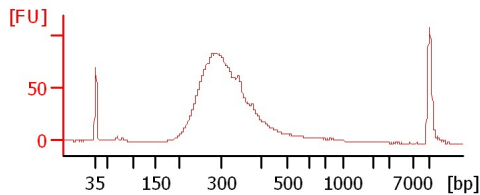
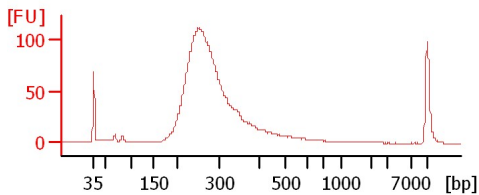
**Johnson B3 mRNA Lib 1:3**



**Johnson B4 mRNA Lib 1:3**

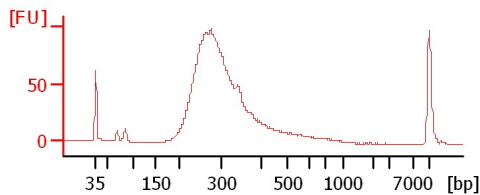
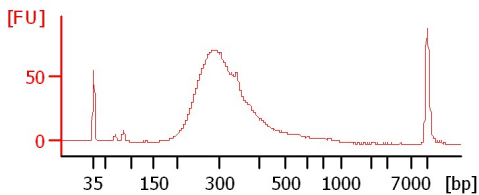
**Johnson B5 mRNA Lib 1:8**

**Johnson B6 mRNA Lib 1:6**



**Johnson B7 mRNA Lib 1:8**

**Johnson B8 mRNA Lib 1:7**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Johnson B1 mRNA Lib 1:3		<input type="checkbox"/>	✓			
Johnson B2 mRNA Lib 1:5		<input type="checkbox"/>	✓			
Johnson B3 mRNA Lib 1:3		<input type="checkbox"/>	✓			
Johnson B4 mRNA Lib 1:3		<input type="checkbox"/>	✓			
Johnson B5 mRNA Lib 1:8		<input type="checkbox"/>	✓			
Johnson B6 mRNA Lib 1:6		<input type="checkbox"/>	✓			
Johnson B7 mRNA Lib 1:8		<input type="checkbox"/>	✓			
Johnson B8 mRNA Lib 1:7		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 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

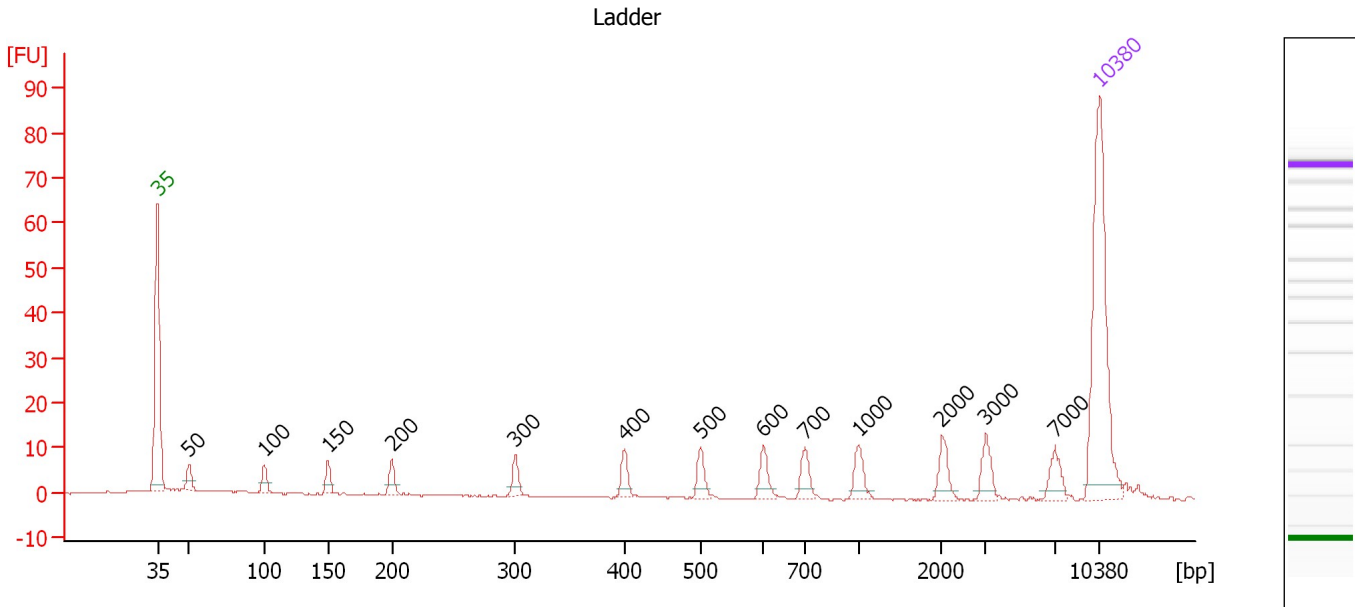
**Ladder**

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:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

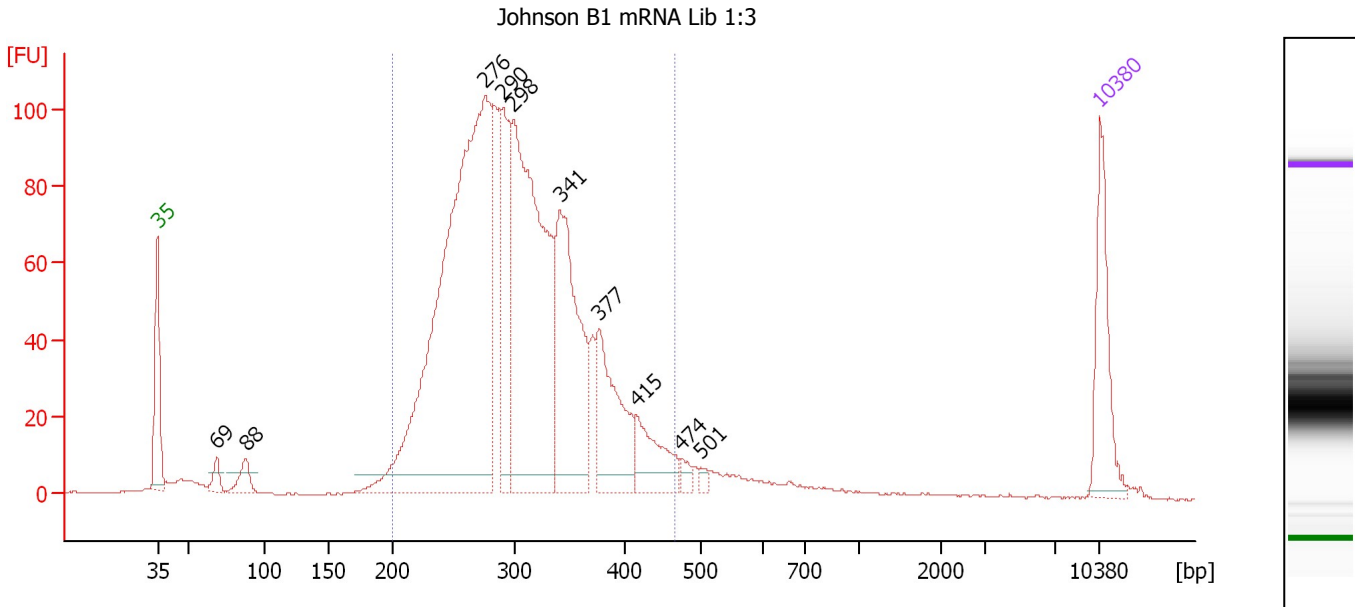
**Peak table for Ladder**

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:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Johnson B1 mRNA Lib 1:3**

Number of peaks found: 10                      Corr. Area 1: 1,683.9  
 Noise: 0.2

**Peak table for sample 1 : Johnson B1 mRNA Lib 1:3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	69	18.65	411.8	
3	88	28.91	498.6	
4	276	918.77	5,051.4	
5	290	152.55	796.6	
6	298	516.51	2,622.7	
7	341	261.59	1,162.4	
8	377	134.87	541.8	
9	415	68.83	251.0	
10	474	10.63	34.0	
11	501	6.35	19.2	
12	10,380	75.00	10.9	Upper Marker

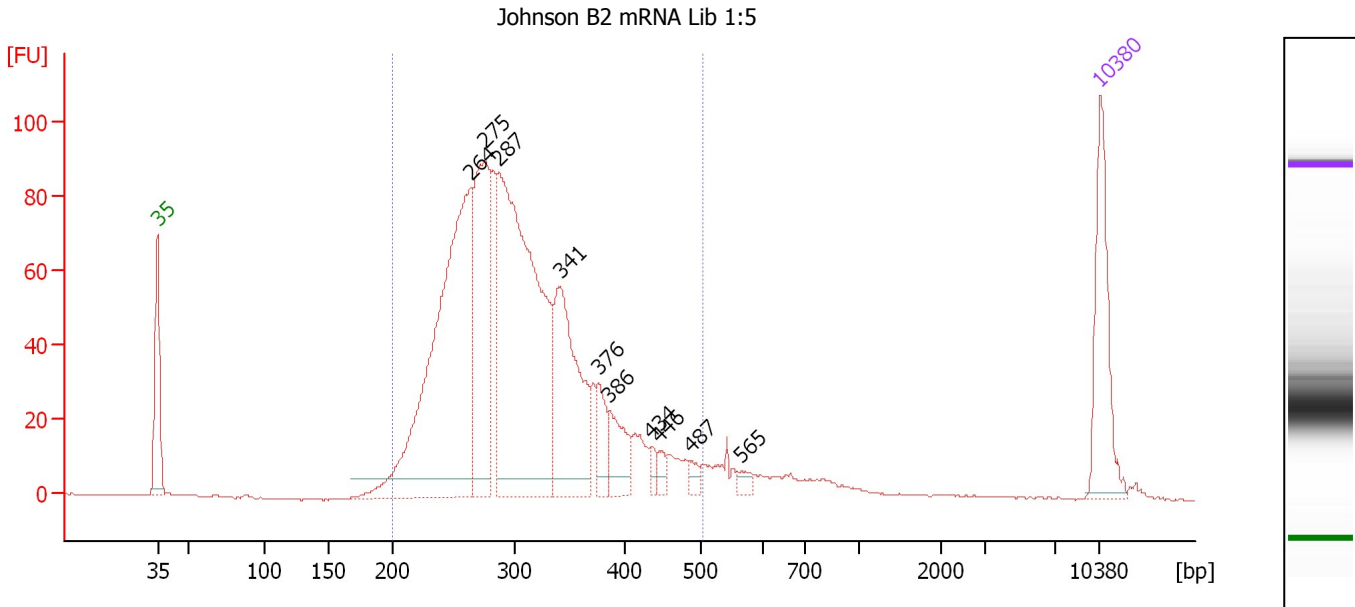
**Region table for sample 1 : Johnson B1 mRNA Lib 1:3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	467	304	11,602.2	2,248.18	1,683.9	90	17.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Johnson B2 mRNA Lib 1:5**

Number of peaks found: 10                      Corr. Area 1: 1,406.0  
 Noise: 0.1

**Peak table for sample 2 : Johnson B2 mRNA Lib 1:5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	494.89	2,842.8	
3	275	212.50	1,168.7	
4	287	494.56	2,613.3	
5	341	176.97	786.8	
6	376	32.34	130.2	
7	386	45.38	178.1	
8	434	9.39	32.8	
9	446	9.30	31.6	
10	487	8.16	25.4	
11	565	7.56	20.3	
12	10,380	75.00	10.9	Upper Marker

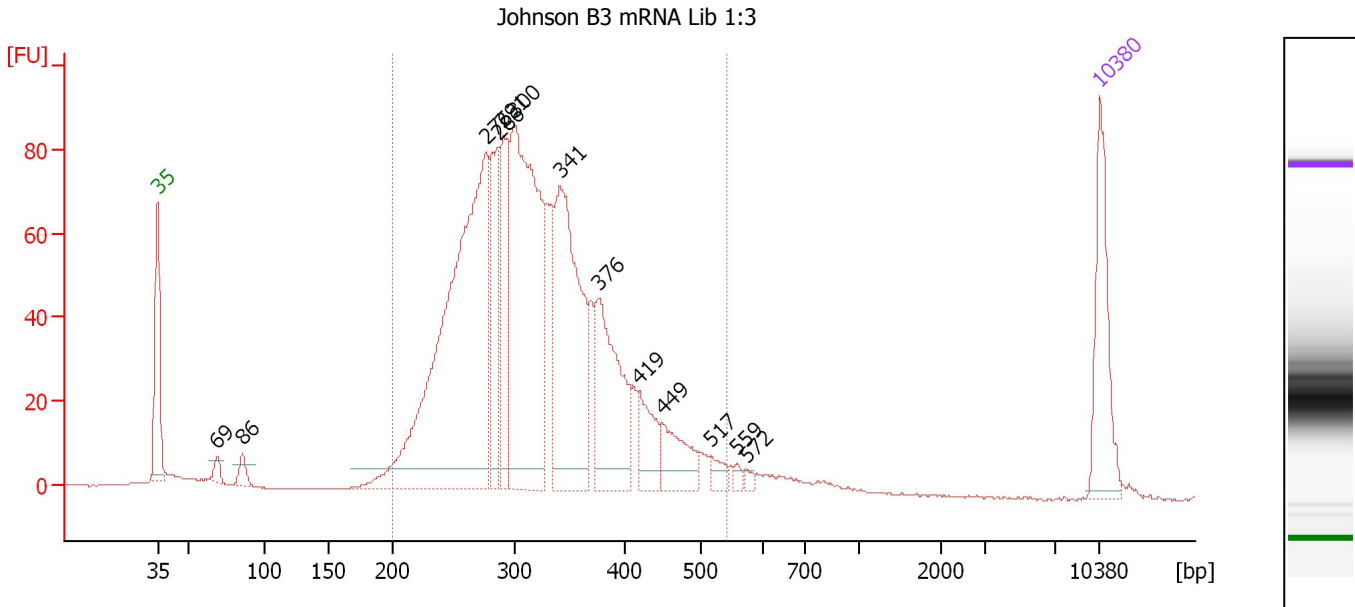
**Region table for sample 2 : Johnson B2 mRNA Lib 1:5**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	505	305	8,312.8	1,604.93	1,406.0	93	19.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Johnson B3 mRNA Lib 1:3**

Number of peaks found: 13                      Corr. Area 1: 1,496.4  
 Noise: 0.2

**Peak table for sample 3 : Johnson B3 mRNA Lib 1:3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	69	11.84	261.0	
3	86	17.05	302.0	
4	276	621.29	3,408.7	
5	286	113.27	599.9	
6	291	108.28	564.6	
7	300	416.45	2,103.3	
8	341	278.27	1,236.6	
9	376	154.26	621.1	
10	419	50.35	182.3	
11	449	51.26	172.8	
12	517	13.80	40.4	
13	559	5.85	15.9	
14	572	4.49	11.9	
15	10,380	75.00	10.9	Upper Marker

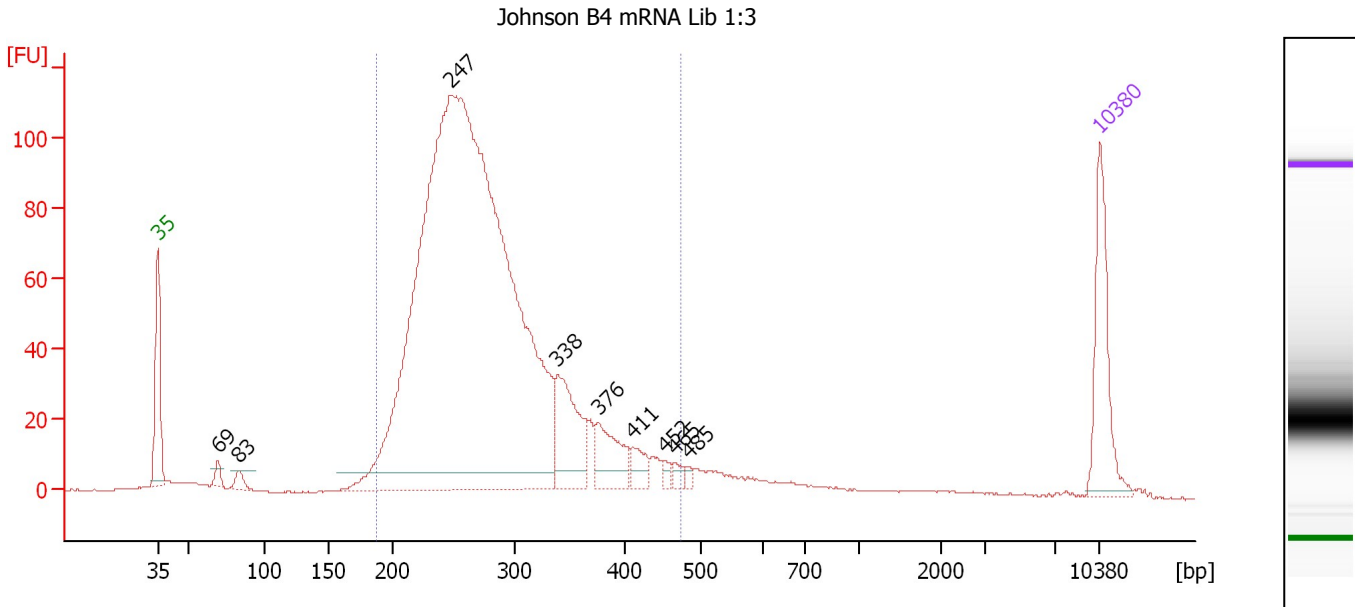
**Region table for sample 3 : Johnson B3 mRNA Lib 1:3**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	541	321	9,840.8	1,984.38	1,496.4	93	20.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Johnson B4 mRNA Lib 1:3**

Number of peaks found: 9                      Corr. Area 1: 1,592.3  
 Noise: 0.2

**Peak table for sample 4 : Johnson B4 mRNA Lib 1:3**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	69	11.96	261.3	
3	83	12.98	236.6	
4	247	1,833.56	11,236.1	
5	338	106.48	476.6	
6	376	58.33	235.0	
7	411	20.12	74.2	
8	452	7.22	24.2	
9	465	7.03	22.9	
10	485	4.74	14.8	
11	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : Johnson B4 mRNA Lib 1:3**

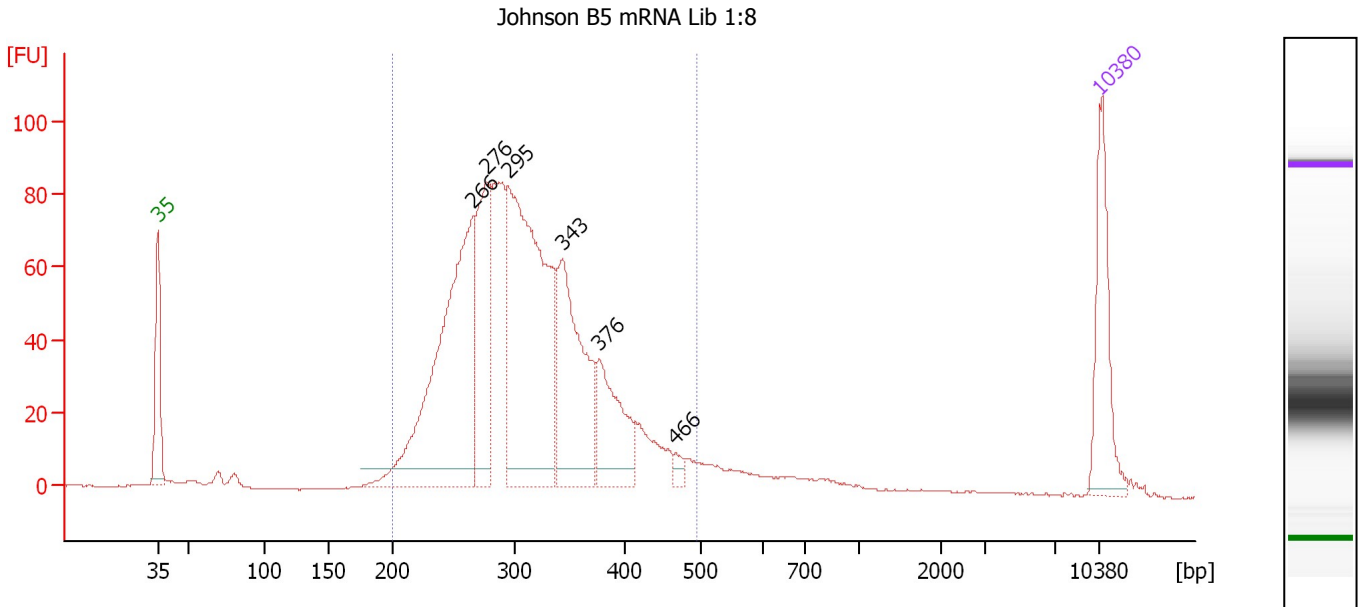
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
188	475	280	11,449.7	2,033.38	1,592.3	91	19.8	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Johnson B5 mRNA Lib 1:8**

Number of peaks found: 6                      Corr. Area 1: 1,394.9  
 Noise: 0.1

**Peak table for sample 5 : Johnson B5 mRNA Lib 1:8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	266	411.39	2,342.4	
3	276	174.34	955.9	
4	295	433.33	2,227.2	
5	343	197.40	871.2	
6	376	101.54	408.8	
7	466	8.44	27.4	
8	10,380	75.00	10.9	Upper Marker

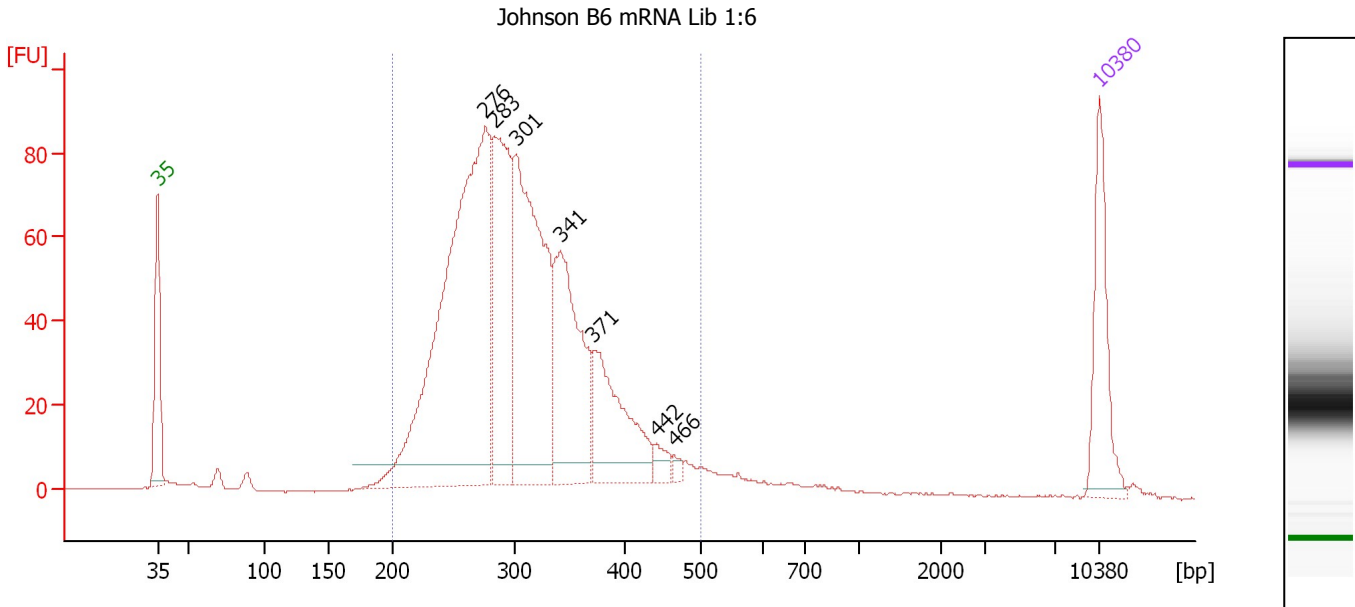
**Region table for sample 5 : Johnson B5 mRNA Lib 1:8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	495	311	8,105.4	1,595.55	1,394.9	91	18.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Johnson B6 mRNA Lib 1:6**

Number of peaks found: 7                      Corr. Area 1: 1,366.1  
 Noise: 0.1

**Peak table for sample 6 : Johnson B6 mRNA Lib 1:6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	276	678.61	3,730.6	
3	283	223.83	1,198.9	
4	301	374.49	1,888.1	
5	341	216.95	962.6	
6	371	142.97	583.4	
7	442	15.40	52.9	
8	466	6.53	21.2	
9	10,380	75.00	10.9	Upper Marker

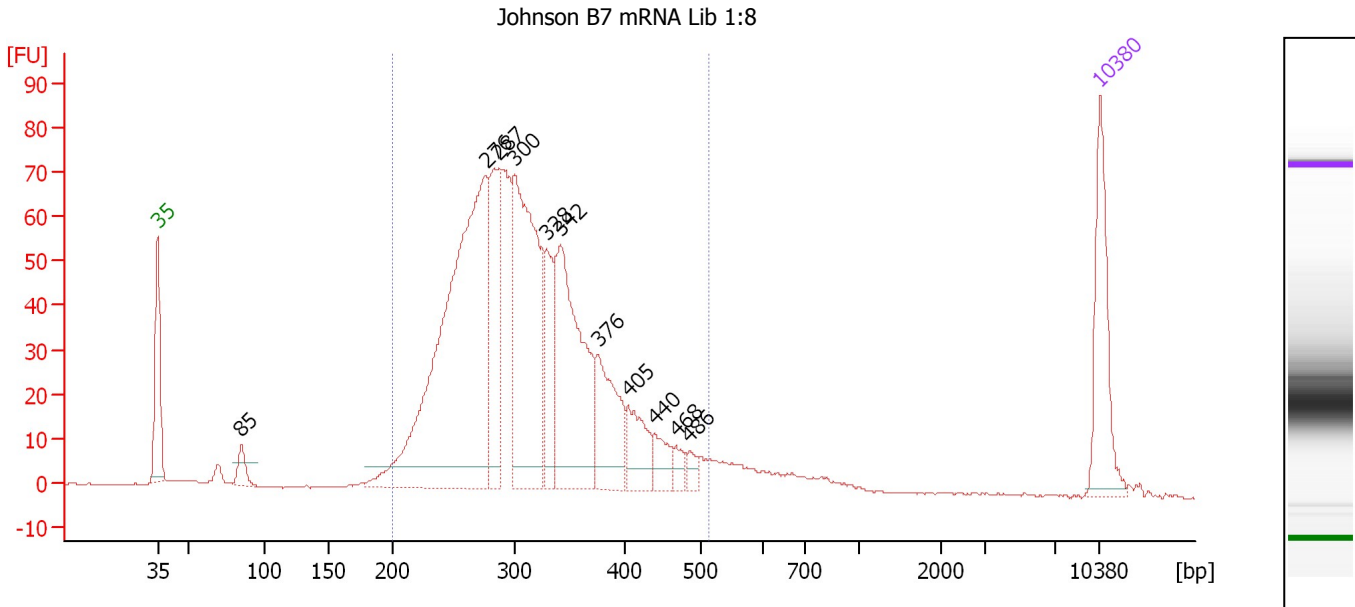
**Region table for sample 6 : Johnson B6 mRNA Lib 1:6**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	501	308	9,175.7	1,789.69	1,366.1	94	18.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Johnson B7 mRNA Lib 1:8**

Number of peaks found: 11                      Corr. Area 1: 1,190.1  
 Noise: 0.2

**Peak table for sample 7 : Johnson B7 mRNA Lib 1:8**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	85	22.77	406.2	
3	276	601.30	3,295.2	
4	287	128.87	680.3	
5	300	301.64	1,525.5	
6	328	70.86	327.3	
7	342	235.69	1,045.0	
8	376	96.49	389.2	
9	405	51.58	192.9	
10	440	26.46	91.2	
11	468	14.44	46.8	
12	486	10.11	31.5	
13	10,380	75.00	10.9	Upper Marker

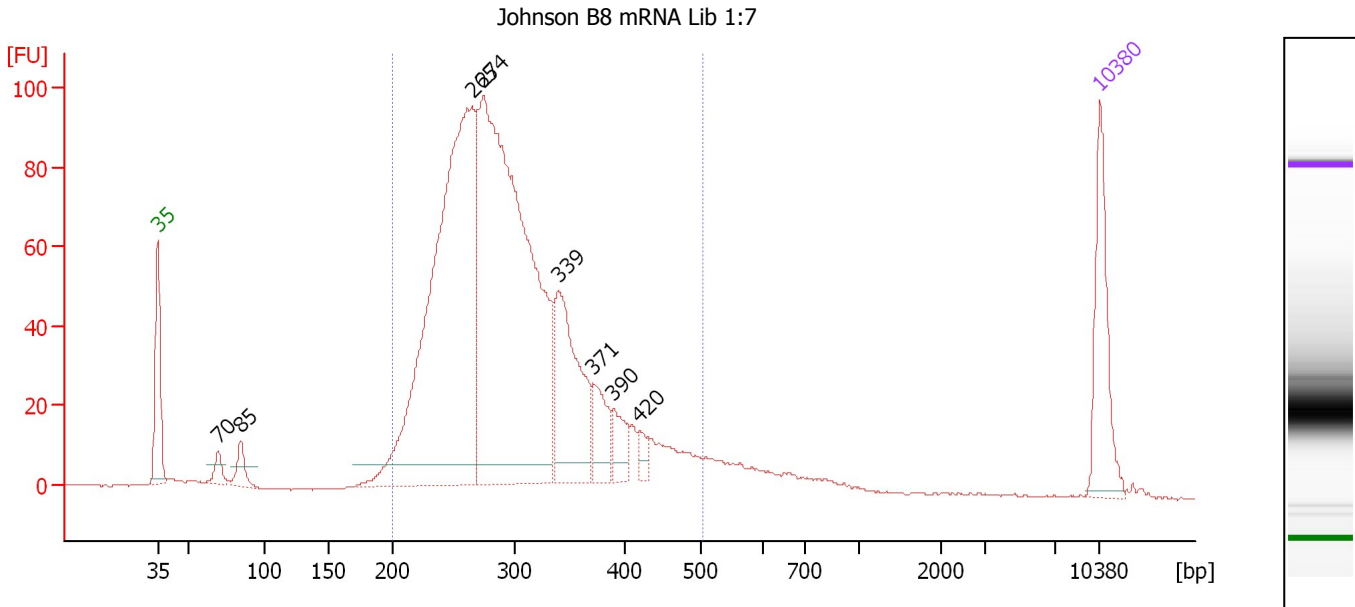
**Region table for sample 7 : Johnson B7 mRNA Lib 1:8**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	515	313	8,769.4	1,733.72	1,190.1	92	19.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
 Modified: 5/8/2013 5:35:25 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Johnson B8 mRNA Lib 1:7**

Number of peaks found: 8                      Corr. Area 1: 1,472.7  
 Noise: 0.2

**Peak table for sample 8 : Johnson B8 mRNA Lib 1:7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	18.09	393.7	
3	85	28.64	513.4	
4	265	736.21	4,210.6	
5	274	856.75	4,738.9	
6	339	175.78	784.7	
7	371	52.10	212.7	
8	390	31.98	124.3	
9	420	12.23	44.1	
10	10,380	75.00	10.9	Upper Marker

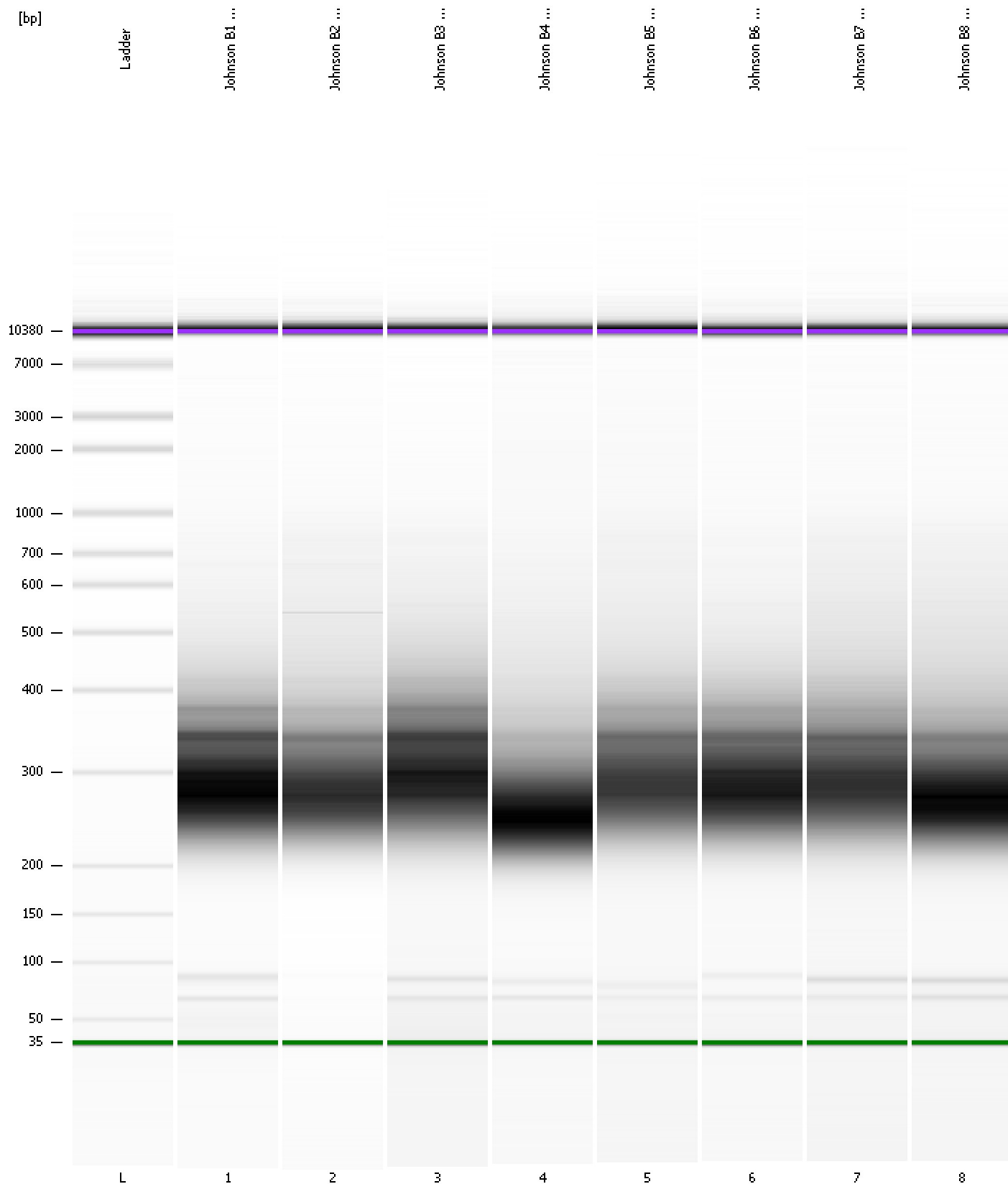
**Region table for sample 8 : Johnson B8 mRNA Lib 1:7**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	505	299	10,461.4	1,978.96	1,472.7	92	19.8	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad

Created: 5/8/2013 4:46:47 PM  
Modified: 5/8/2013 5:35:25 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay Created: 5/8/2013 4:46:47 PM  
 Data Path: C:\...ioanalyzer\2013-05-08\2013-05-08\_003\_Johnson\_B\_mRNA\_Lib.xad Modified: 5/8/2013 5:35:25 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		5/8/2013 5:28:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-08\2013-05-08_003.xad)		Instrument	Run		5/8/2013 4:46:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/8/2013 4:46:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/8/2013 4:46:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/8/2013 4:46:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/8/2013 4:46:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/8/2013 4:46:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/8/2013 4:46:48 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1