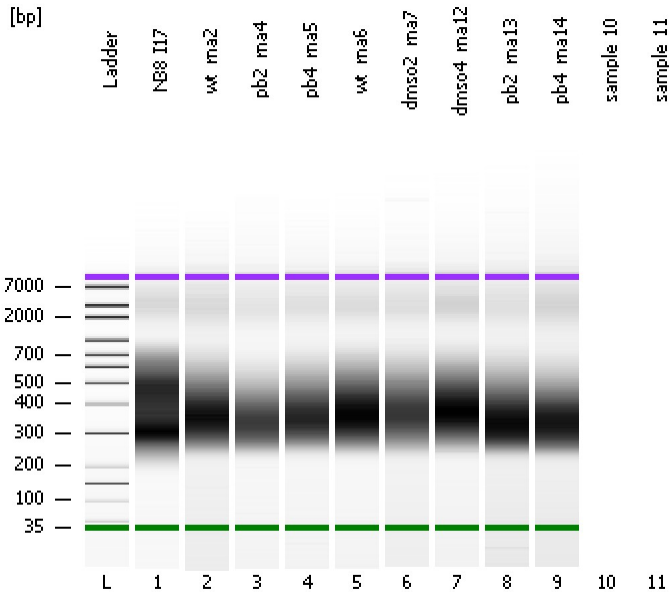


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
Modified: 4/17/2018 4:34:03 PM

**Electrophoresis File Run Summary**



Instrument Information:

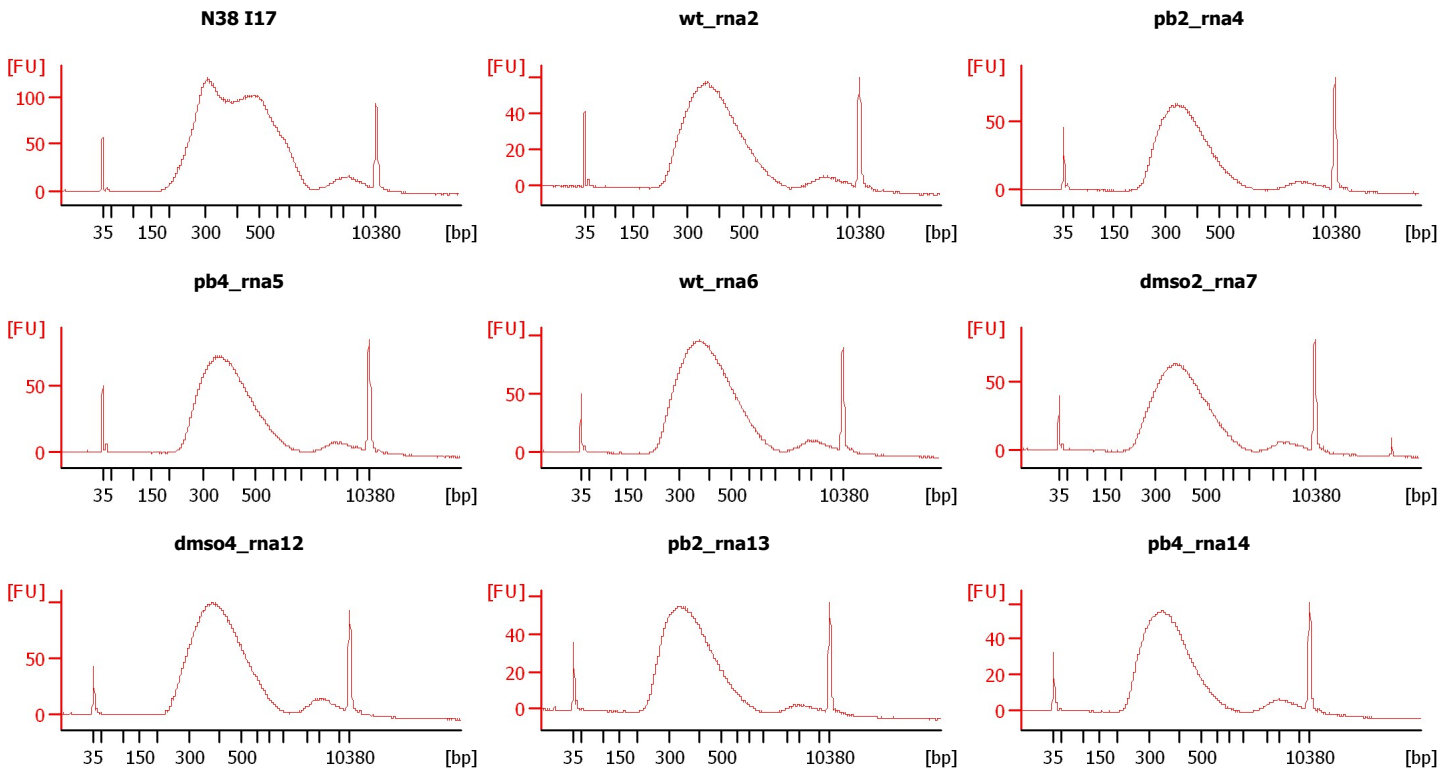
Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
N38 I17		<input type="checkbox"/>	✓			
wt_rna2		<input type="checkbox"/>	✓			
pb2_rna4		<input type="checkbox"/>	✓			
pb4_rna5		<input type="checkbox"/>	✓			
wt_rna6		<input type="checkbox"/>	✓			
dms02_rna7		<input type="checkbox"/>	✓			
dms04_rna12		<input type="checkbox"/>	✓			
pb2_rna13		<input type="checkbox"/>	✓			
pb4_rna14		<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:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
Modified: 4/17/2018 4:34:03 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

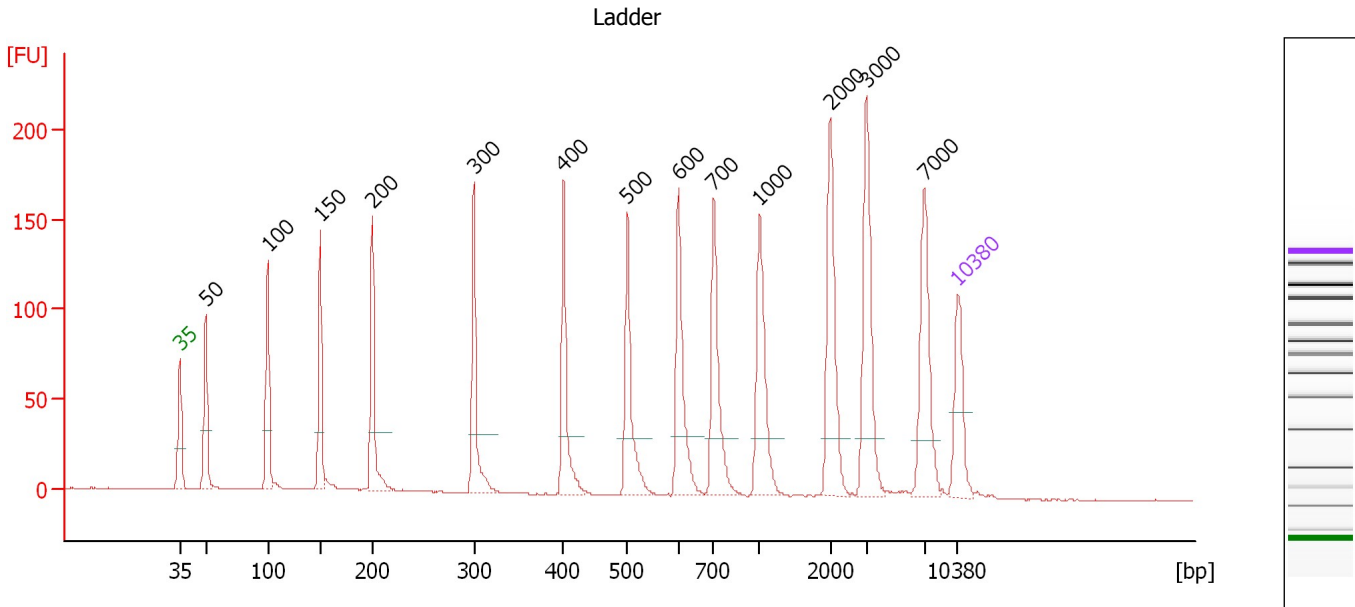
**Ladder**

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:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

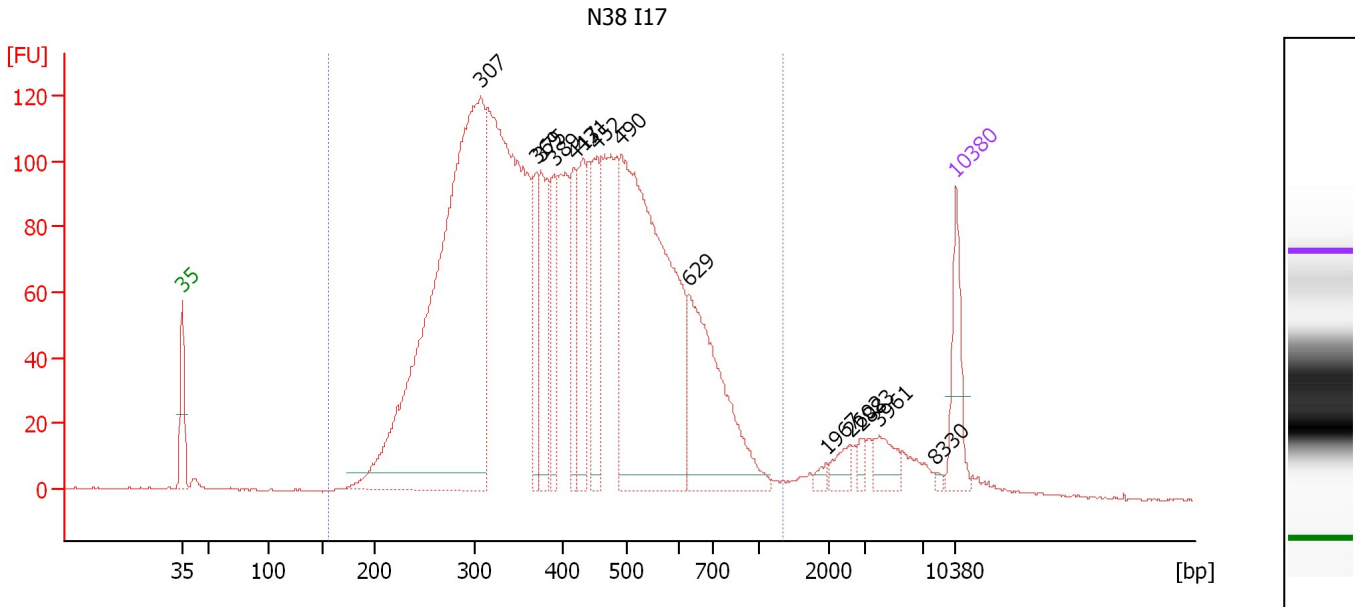
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.30
3	100	150.00	2,272.7	Ladder Peak	50.87
4	150	150.00	1,515.2	Ladder Peak	55.62
5	200	150.00	1,136.4	Ladder Peak	60.32
6	300	150.00	757.6	Ladder Peak	69.44
7	400	150.00	568.2	Ladder Peak	77.50
8	500	150.00	454.5	Ladder Peak	83.25
9	600	150.00	378.8	Ladder Peak	87.86
10	700	150.00	324.7	Ladder Peak	91.03
11	1,000	150.00	227.3	Ladder Peak	95.15
12	2,000	150.00	113.6	Ladder Peak	101.49
13	3,000	150.00	75.8	Ladder Peak	104.75
14	7,000	150.00	32.5	Ladder Peak	109.98
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : N38 I17**

Number of peaks found: 14                      Corr. Area 1: 3,491.6  
 Noise: 0.3

**Peak table for sample 1 : N38 I17**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	307	1,469.05	7,245.7		70.02
3	369	118.30	485.2		75.03
4	375	169.47	685.0		75.47
5	389	112.36	437.4		76.63
6	417	110.46	401.6		78.46
7	431	154.45	543.0		79.28
8	452	154.00	516.3		80.48
9	490	863.30	2,667.0		82.70
10	629	329.72	794.1		88.78
11	1,967	9.33	7.2		101.28
12	2,602	24.27	14.1		103.45
13	2,883	11.16	5.9		104.36
14	3,961	35.93	13.7		106.00
15	8,330	4.52	0.8		111.17
16	10,380	75.00	10.9	Upper Marker	113.00

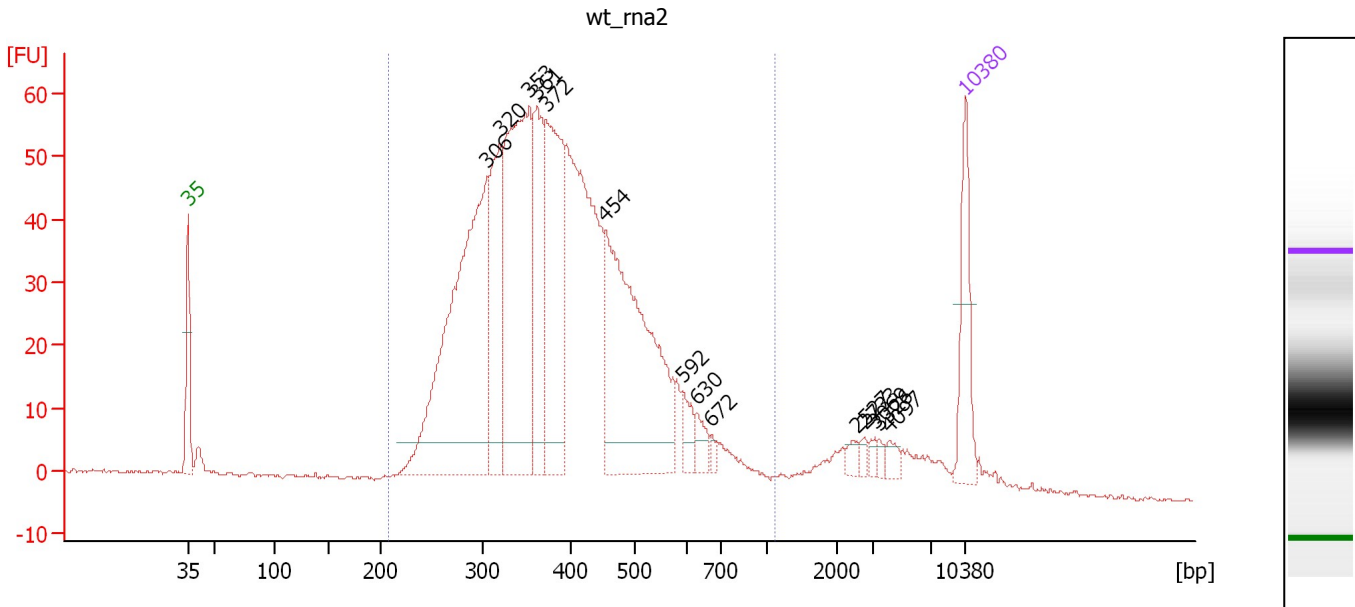
**Region table for sample 1 : N38 I17**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
157	1,337	425	5,086.73	3,491.6	21,066.2	95	34.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : wt\_rna2**

Number of peaks found: 14                      Corr. Area 1: 1,304.5  
 Noise: 0.3

**Peak table for sample 2 : wt\_rna2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	306	612.38	3,030.4		69.93
3	320	190.59	901.1		71.09
4	353	454.97	1,951.5		73.73
5	361	180.14	756.1		74.35
6	372	288.82	1,175.4		75.26
7	454	433.80	1,448.4		80.59
8	592	28.64	73.2		87.51
9	630	22.29	53.6		88.80
10	672	7.42	16.7		90.15
11	2,527	9.30	5.6		103.21
12	2,733	6.34	3.5		103.88
13	3,069	6.31	3.1		104.84
14	3,326	5.37	2.4		105.17
15	4,097	11.27	4.2		106.18
16	10,380	75.00	10.9	Upper Marker	113.00

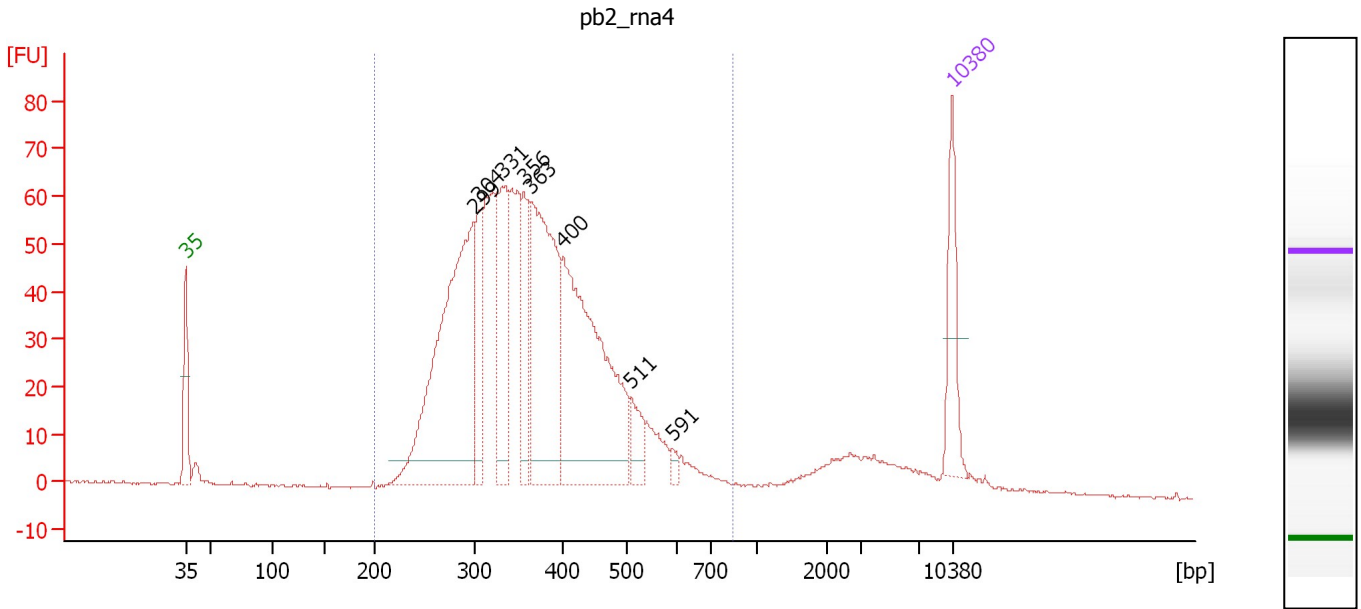
**Region table for sample 2 : wt\_rna2**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
208	1,110	398	2,858.66	1,304.5	11,887.2	93	27.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : pb2\_rna4**

Number of peaks found: 8                      Corr. Area 1: 1,302.9  
 Noise: 0.3

**Peak table for sample 3 : pb2\_rna4**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	299	586.19	2,966.2		69.38
3	304	102.14	508.8		69.77
4	331	176.19	805.6		71.96
5	356	103.13	439.5		73.91
6	363	369.87	1,542.3		74.54
7	400	463.88	1,758.8		77.46
8	511	44.79	132.9		83.74
9	591	9.95	25.5		87.44
10	10,380	75.00	10.9	Upper Marker	113.00

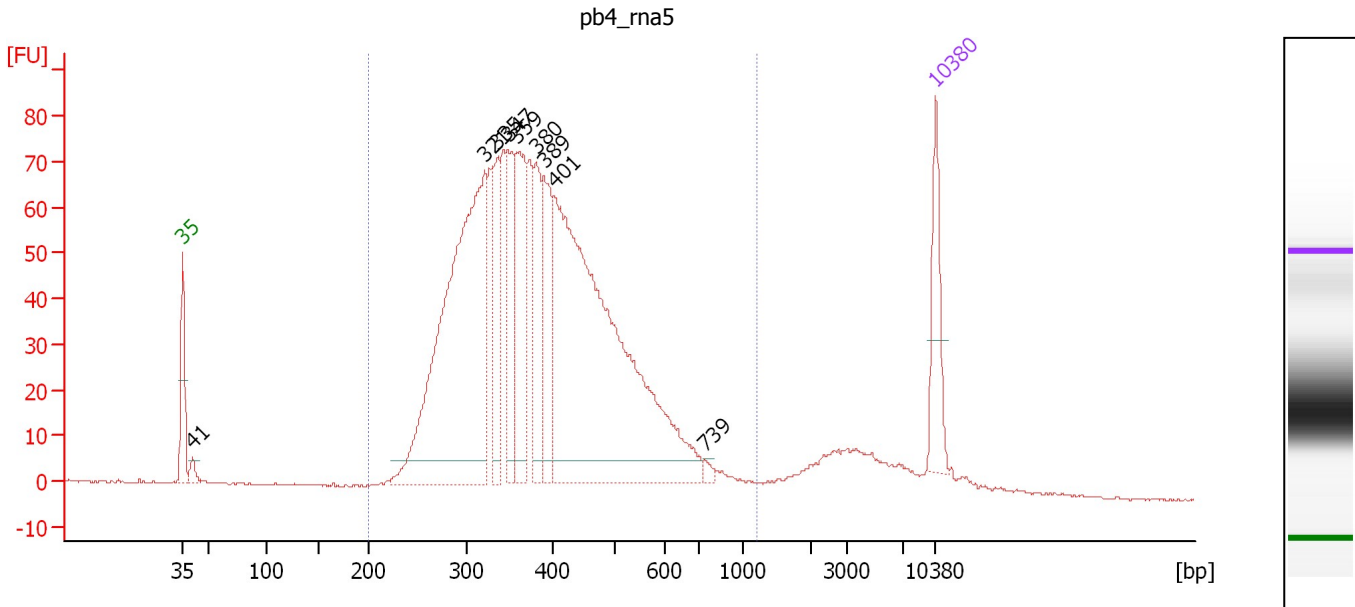
**Region table for sample 3 : pb2\_rna4**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	842	371	2,409.95	1,302.9	10,545.1	92	23.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : pb4\_rna5**

Number of peaks found: 9                      Corr. Area 1: 1,613.0  
 Noise: 0.2

**Peak table for sample 4 : pb4\_rna5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	41	19.11	703.9		43.94
3	321	780.23	3,682.7		71.13
4	335	132.82	600.4		72.27
5	347	141.68	617.8		73.26
6	359	196.48	830.3		74.16
7	380	124.64	496.9		75.89
8	389	137.28	535.1		76.59
9	401	924.50	3,497.0		77.53
10	739	7.26	14.9		91.57
11	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : pb4\_rna5**

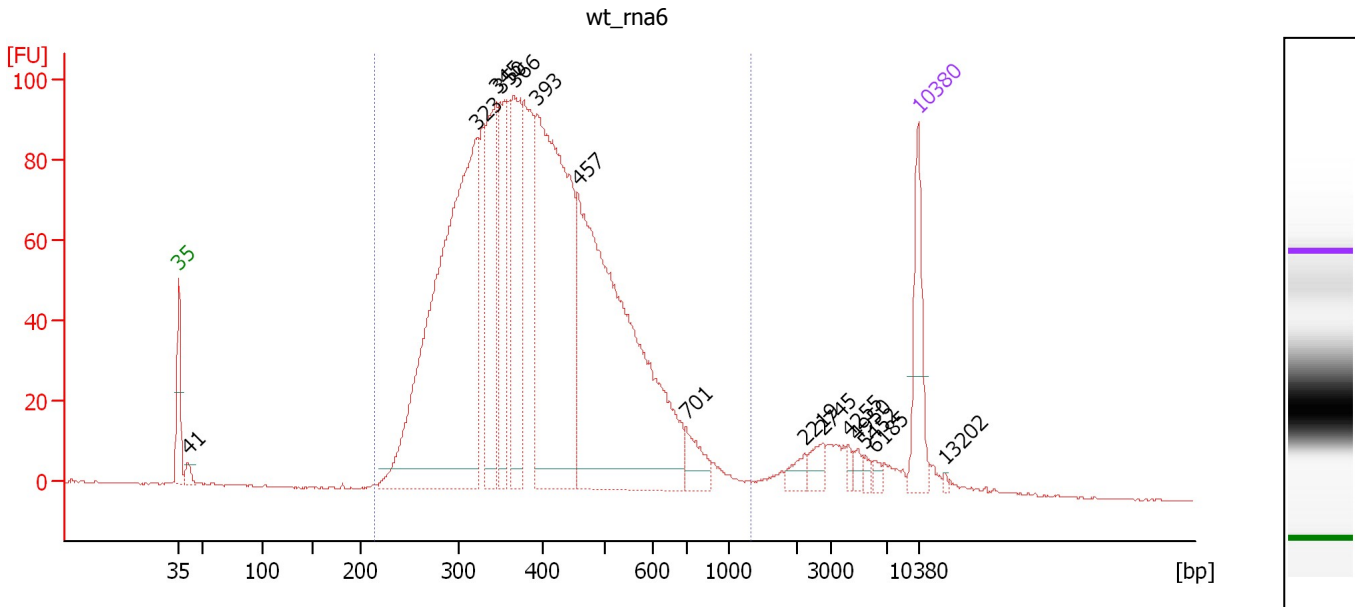
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,196	399	2,852.30	1,613.0	11,832.2	92	28.3



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : wt\_rna6**

Number of peaks found: 15                      Corr. Area 1: 2,245.1  
 Noise: 0.2

**Peak table for sample 5 : wt\_rna6**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	41	17.35	647.7		43.86
3	323	908.02	4,263.9		71.26
4	345	230.72	1,012.7		73.08
5	350	173.87	753.6		73.43
6	366	218.31	904.1		74.74
7	393	631.85	2,433.4		76.97
8	457	764.25	2,531.6		80.80
9	701	42.44	91.7		91.05
10	2,219	15.82	10.8		102.20
11	2,745	19.49	10.8		103.92
12	4,255	7.39	2.6		106.39
13	4,950	8.66	2.6		107.30
14	5,452	6.76	1.9		107.95
15	6,185	7.27	1.8		108.91
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,202	0.00	0.0		115.52

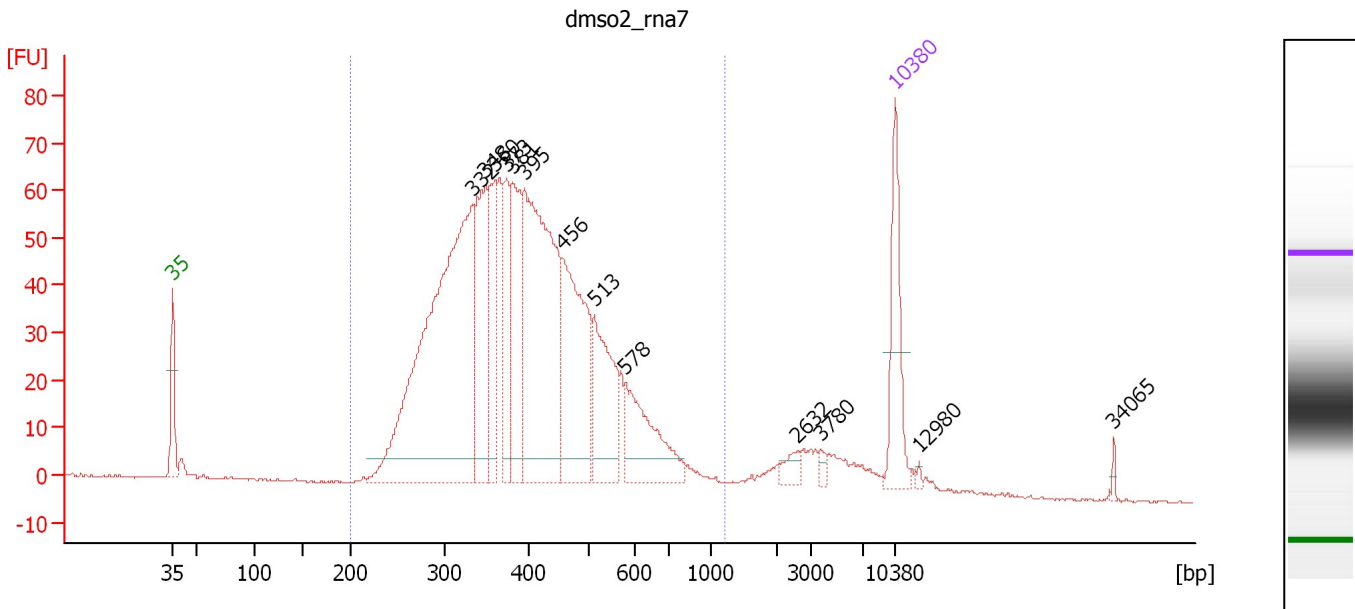
**Region table for sample 5 : wt\_rna6**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
213	1,314	412	3,426.18	2,245.1	13,918.3	94	30.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : dms02\_rna7**

Number of peaks found: 13                      Corr. Area 1: 1,446.3  
 Noise: 0.2

**Peak table for sample 6 : dms02\_rna7**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	332	677.71	3,090.8		72.03
3	348	177.73	773.3		73.32
4	360	110.40	464.9		74.25
5	373	87.56	355.4		75.34
6	381	136.09	541.3		75.96
7	395	400.98	1,538.0		77.10
8	456	224.16	745.0		80.71
9	513	130.99	386.7		83.86
10	578	108.74	284.9		86.86
11	2,632	12.76	7.3		103.55
12	3,780	6.30	2.5		105.77
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,980	0.00	0.0		115.32
15	34,065	0.00	0.0		134.18

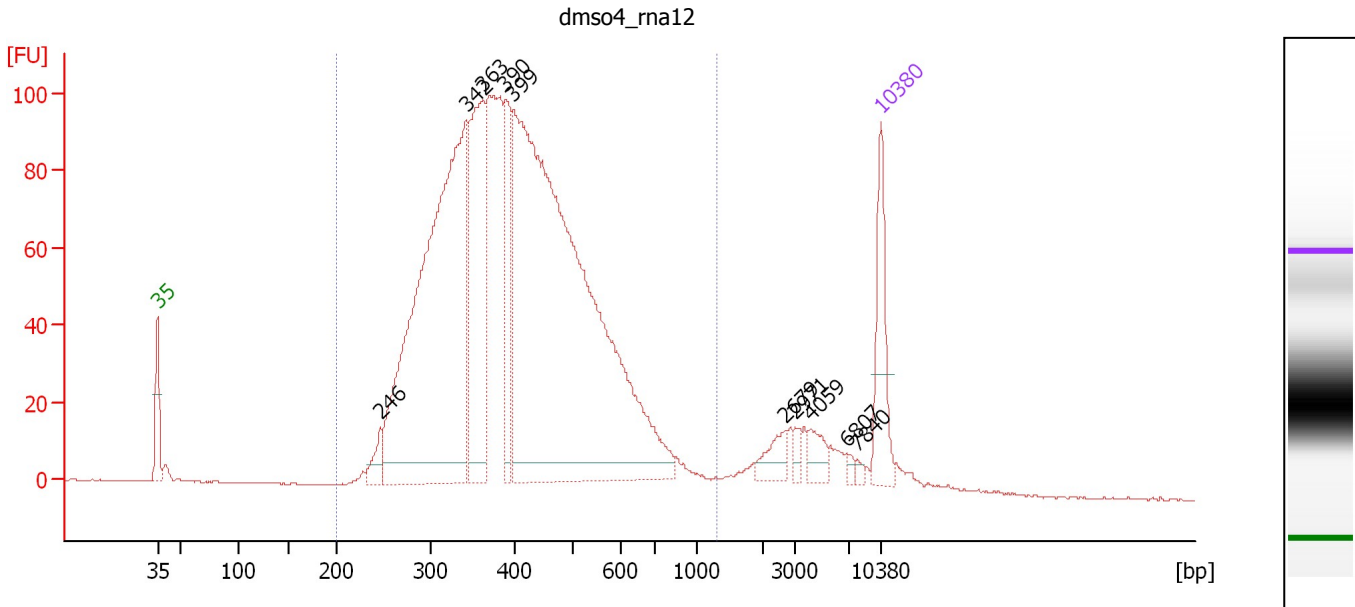
**Region table for sample 6 : dms02\_rna7**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,198	409	2,282.32	1,446.3	9,281.6	93	28.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : dms04\_rna12**

Number of peaks found: 10                      Corr. Area 1: 2,238.1  
 Noise: 0.2

**Peak table for sample 7 : dms04\_rna12**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	246	31.67	194.7		64.55
3	342	862.99	3,819.4		72.85
4	363	273.39	1,142.2		74.49
5	390	121.47	472.5		76.65
6	399	1,265.96	4,810.8		77.39
7	2,679	26.11	14.8		103.70
8	2,971	9.26	4.7		104.65
9	4,059	21.97	8.2		106.13
10	6,807	5.59	1.2		109.72
11	7,840	4.53	0.9		110.73
12	10,380	75.00	10.9	Upper Marker	113.00

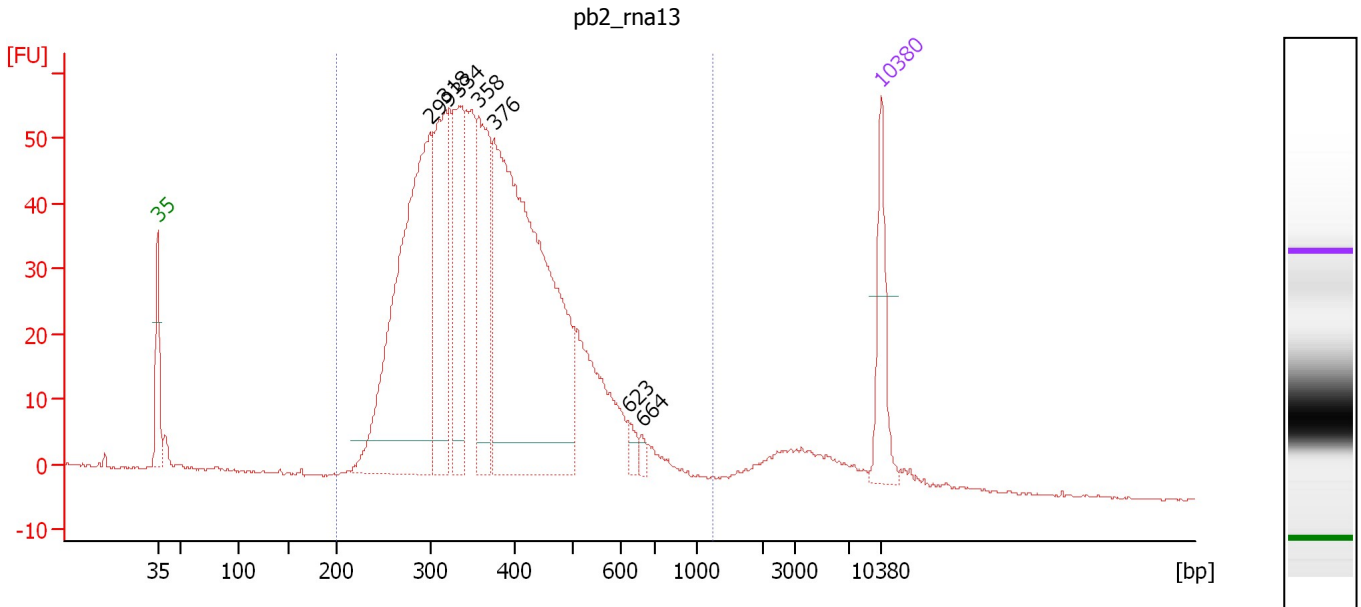
**Region table for sample 7 : dms04\_rna12**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,306	419	2,984.55	2,238.1	11,869.7	92	29.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : pb2\_rna13**

Number of peaks found: 7                      Corr. Area 1: 1,226.3  
 Noise: 0.2

**Peak table for sample 8 : pb2\_rna13**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	299	696.01	3,525.2		69.36
3	318	279.20	1,331.1		70.87
4	334	191.53	869.2		72.17
5	358	231.96	981.7		74.11
6	376	854.30	3,441.7		75.57
7	623	16.08	39.1		88.59
8	664	8.73	19.9		89.88
9	10,380	75.00	10.9	Upper Marker	113.00

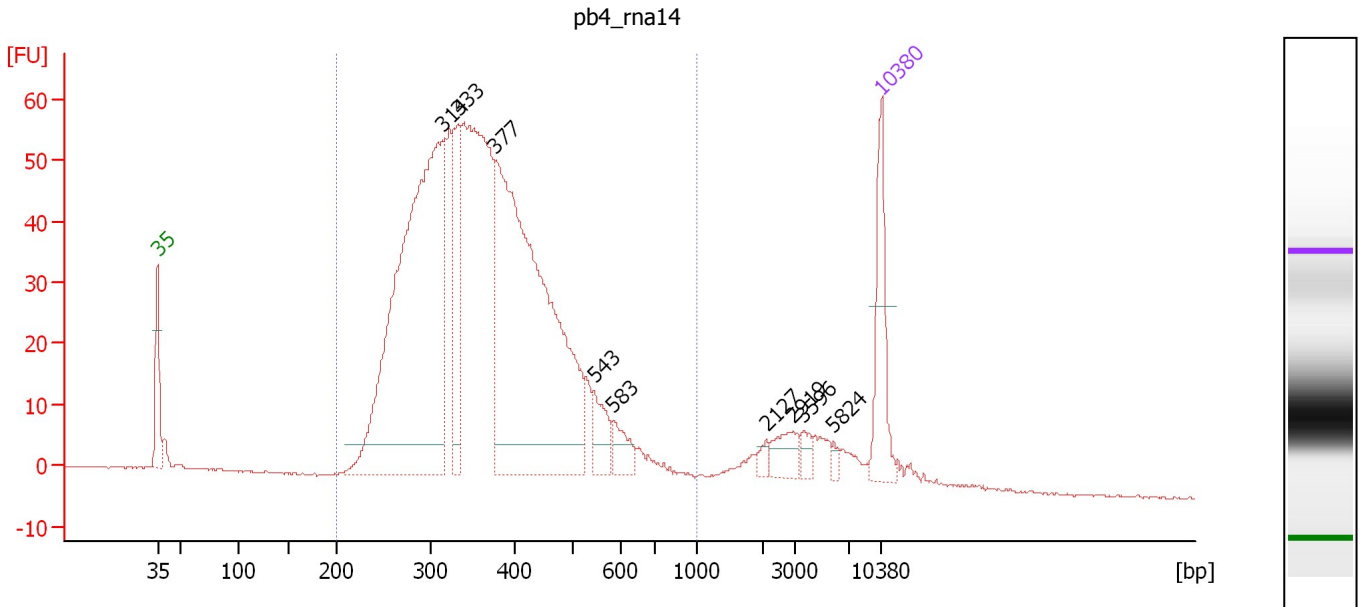
**Region table for sample 8 : pb2\_rna13**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,236	384	2,800.66	1,226.3	12,049.8	94	28.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
 Modified: 4/17/2018 4:34:03 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : pb4\_rna14**

Number of peaks found: 9                      Corr. Area 1: 1,203.0  
 Noise: 0.2

**Peak table for sample 9 : pb4\_rna14**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	314	818.99	3,949.1		70.58
3	333	113.52	517.1		72.07
4	377	738.23	2,967.4		75.64
5	543	41.71	116.3		85.25
6	583	29.40	76.4		87.07
7	2,127	8.62	6.1		101.90
8	2,919	27.16	14.1		104.48
9	3,596	11.29	4.8		105.53
10	5,824	5.23	1.4		108.44
11	10,380	75.00	10.9	Upper Marker	113.00

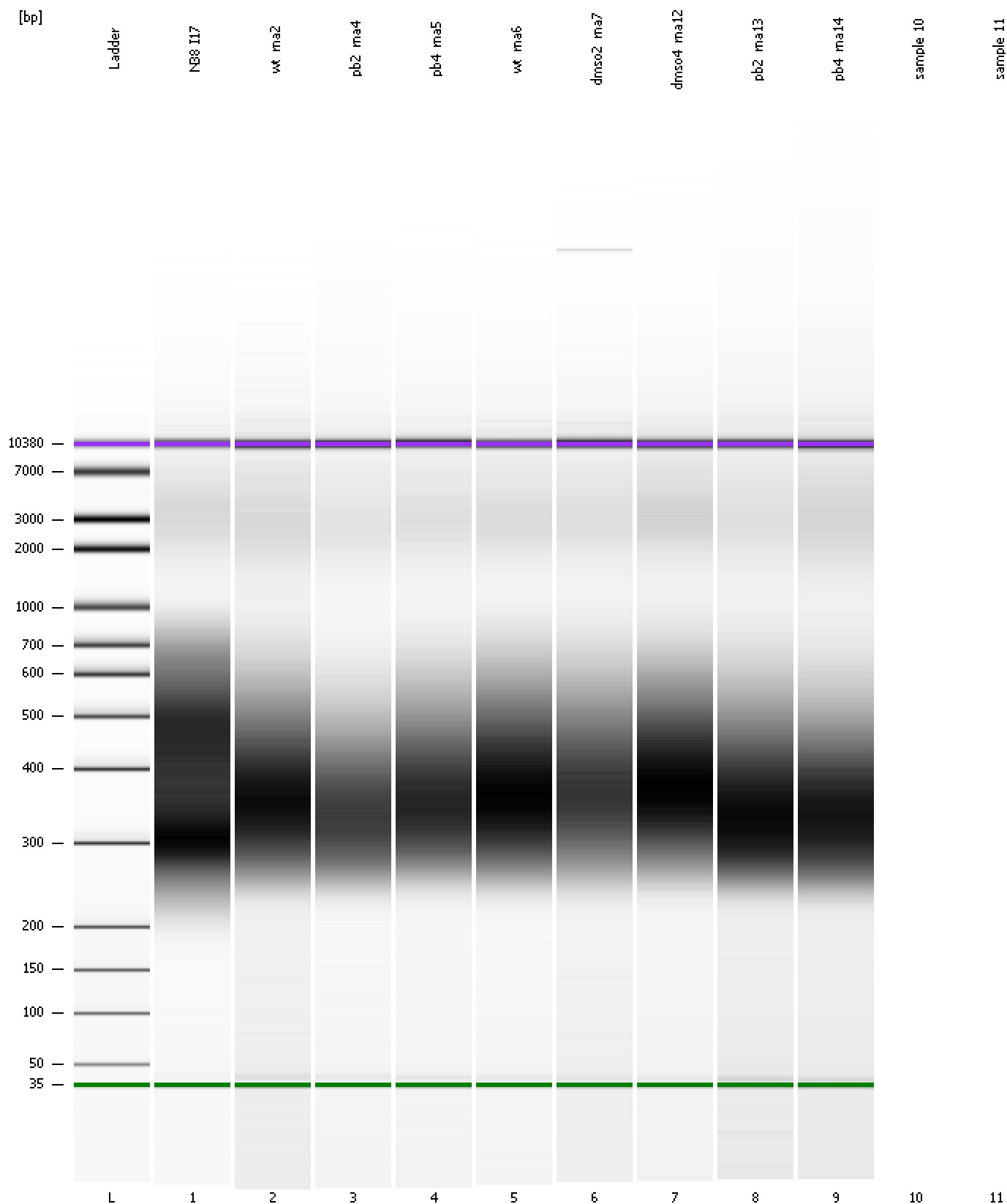
**Region table for sample 9 : pb4\_rna14**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	375	2,461.44	1,203.0	10,773.0	91	26.3

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
Modified: 4/17/2018 4:34:03 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-17\2018-04-17\_003.xad

Created: 4/17/2018 3:59:15 PM  
Modified: 4/17/2018 4:34:03 PM

**Curves**

**Standard Curve**

