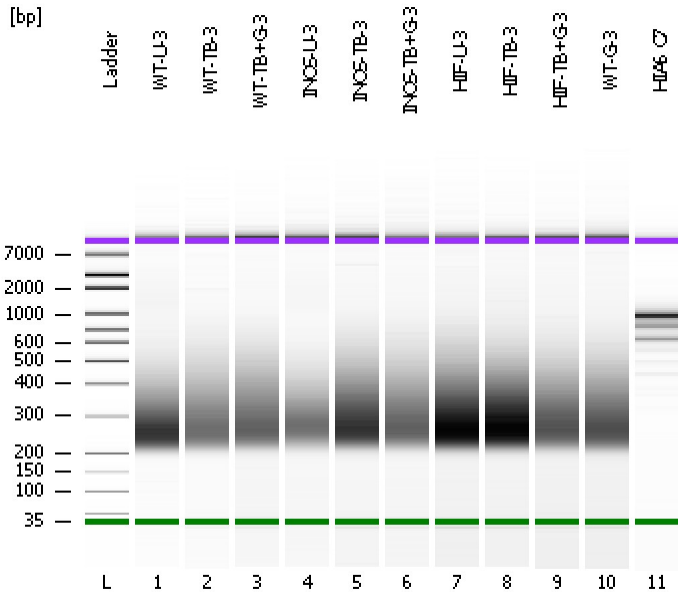


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electrophoresis File Run Summary



Instrument Information:

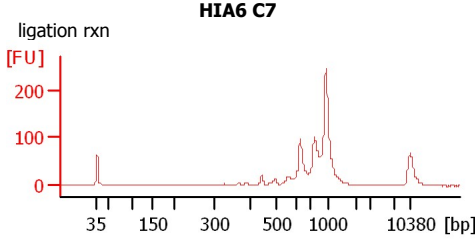
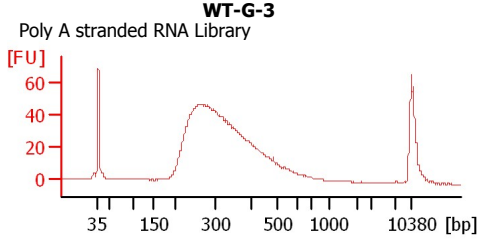
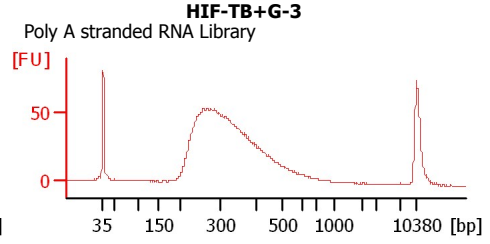
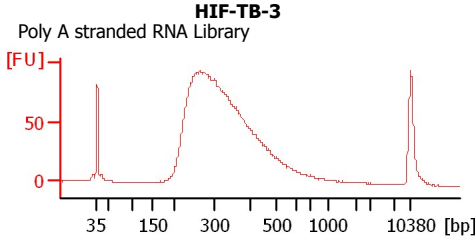
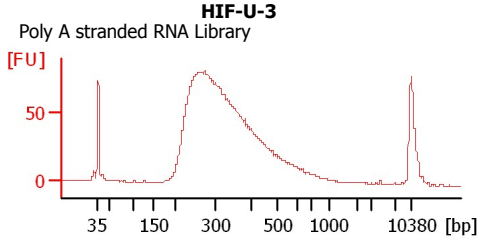
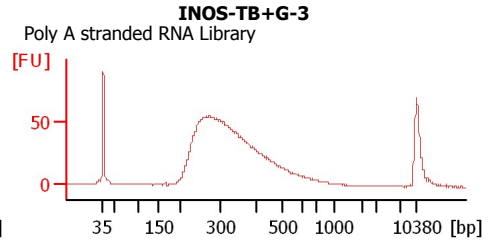
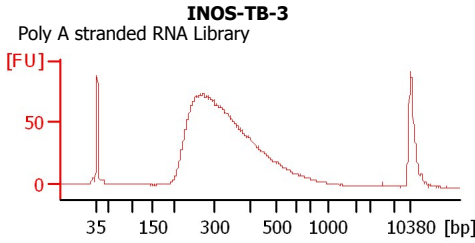
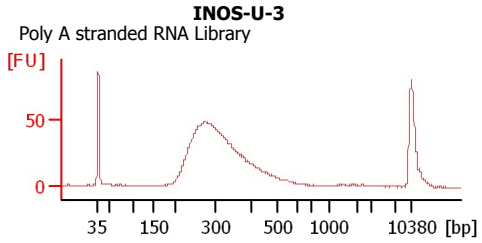
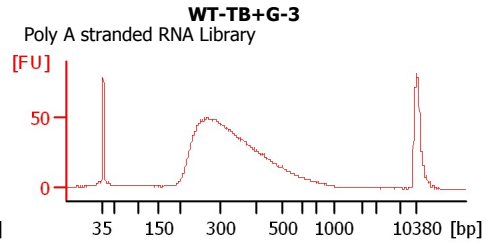
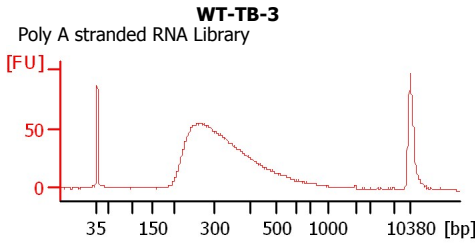
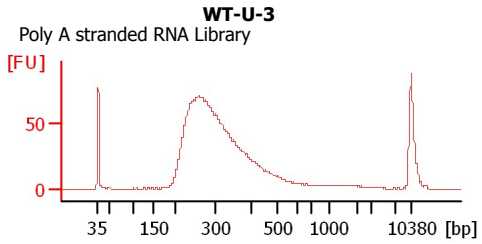
Instrument Name: DE13701086 Firmware: C.01.069
 Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WT-U-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
WT-TB-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
WT-TB+G-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
INOS-U-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
INOS-TB-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
INOS-TB+G-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
HIF-U-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
HIF-TB-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
HIF-TB+G-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
WT-G-3	Poly A stranded RNA Library	<input type="checkbox"/>	✓			
HIA6 C7	ligation rxn	<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\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

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

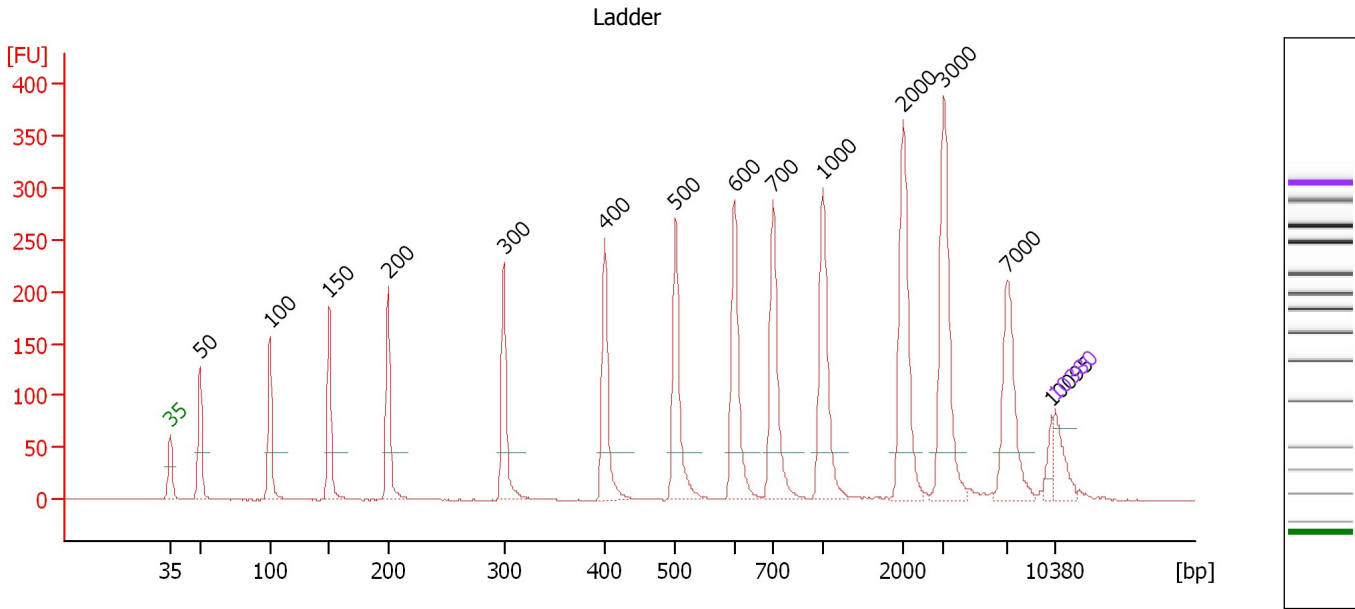
Ladder

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\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

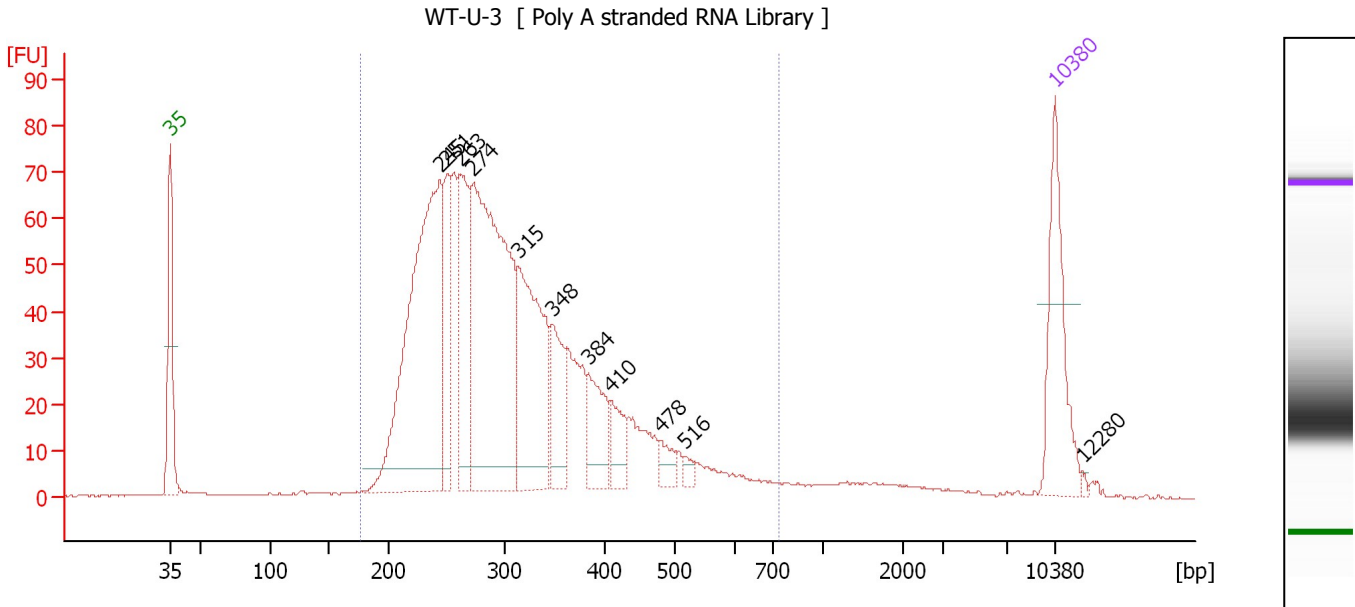
Peak table for Ladder

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	10,095	0.00	0.0	
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WT-U-3

Number of peaks found: 11 Corr. Area 1: 1,429.5
 Noise: 0.2

Peak table for sample 1 : WT-U-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	245	404.93	2,502.9	
3	251	81.52	491.7	
4	263	126.16	726.0	
5	274	396.54	2,193.6	
6	315	181.55	874.2	
7	348	65.00	282.8	
8	384	57.19	225.5	
9	410	29.60	109.5	
10	478	15.59	49.4	
11	516	7.03	20.6	
12	10,380	75.00	10.9	Upper Marker
13	12,280	0.00	0.0	

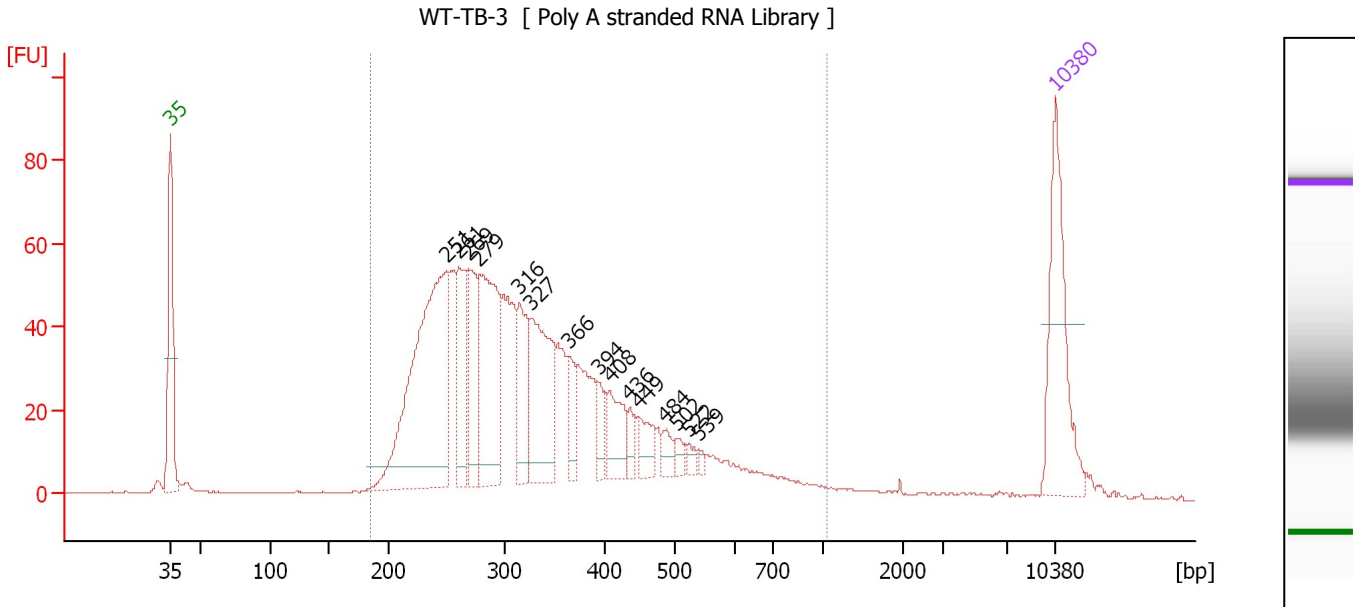
Region table for sample 1 : WT-U-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
176	316	734	1,429.5	94	28.6	1,691.28	8,863.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WT-TB-3

Number of peaks found: 15 Corr. Area 1: 1,292.1
 Noise: 0.2

Peak table for sample 2 : WT-TB-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	251	284.49	1,720.6	
3	261	67.88	393.7	
4	269	69.32	389.9	
5	279	135.18	734.0	
6	316	58.13	278.9	
7	327	104.16	481.9	
8	366	24.21	100.3	
9	394	17.46	67.2	
10	408	34.86	129.3	
11	436	11.08	38.5	
12	449	20.14	68.0	
13	484	11.00	34.4	
14	502	8.14	24.5	
15	522	5.68	16.5	
16	539	3.47	9.7	
17	10,380	75.00	10.9	Upper Marker

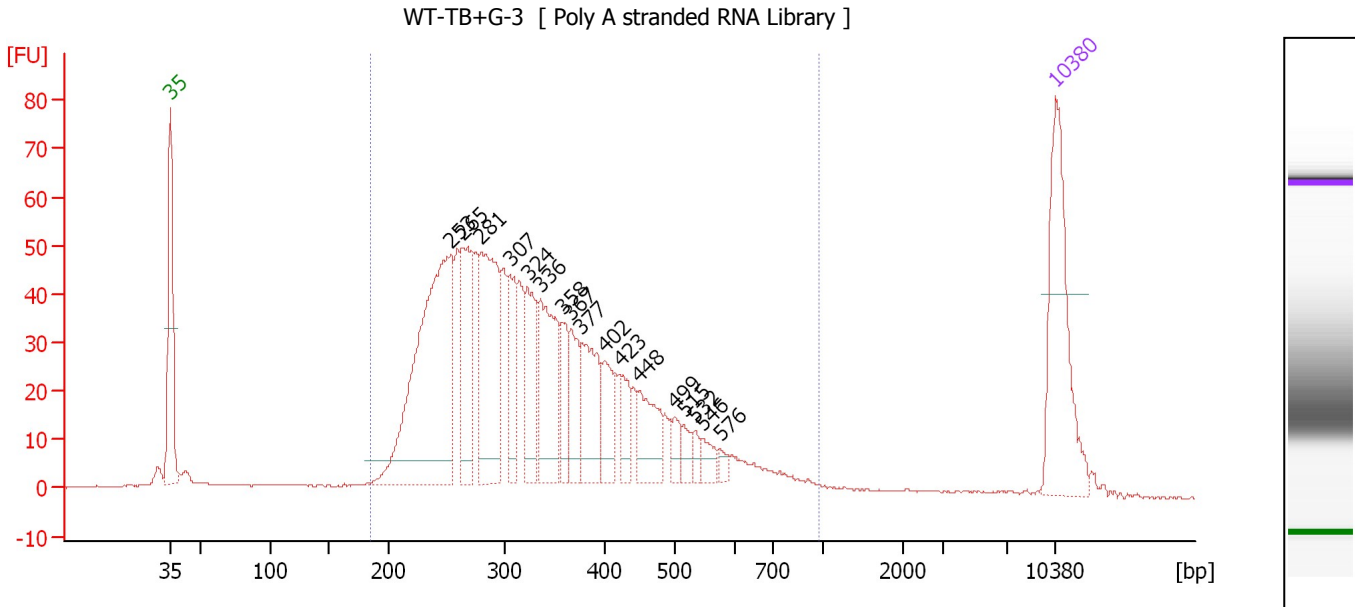
Region table for sample 2 : WT-TB-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
186	343	1,054	1,292.1	95	34.7	1,272.33	6,336.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : WT-TB+G-3

Number of peaks found: 17 Corr. Area 1: 1,218.0
 Noise: 0.1

Peak table for sample 3 : WT-TB+G-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	253	254.93	1,524.2	
3	265	76.86	439.8	
4	281	124.63	672.6	
5	307	46.12	227.6	
6	324	51.15	239.1	
7	336	80.63	363.6	
8	358	29.51	124.9	
9	367	33.89	139.8	
10	377	51.94	208.5	
11	402	31.65	119.4	
12	423	21.69	77.8	
13	448	37.17	125.6	
14	499	10.93	33.2	
15	515	9.18	27.0	
16	532	6.72	19.1	
17	546	9.39	26.0	
18	576	4.72	12.4	
19	10,380	75.00	10.9	Upper Marker

Region table for sample 3 : WT-TB+G-3

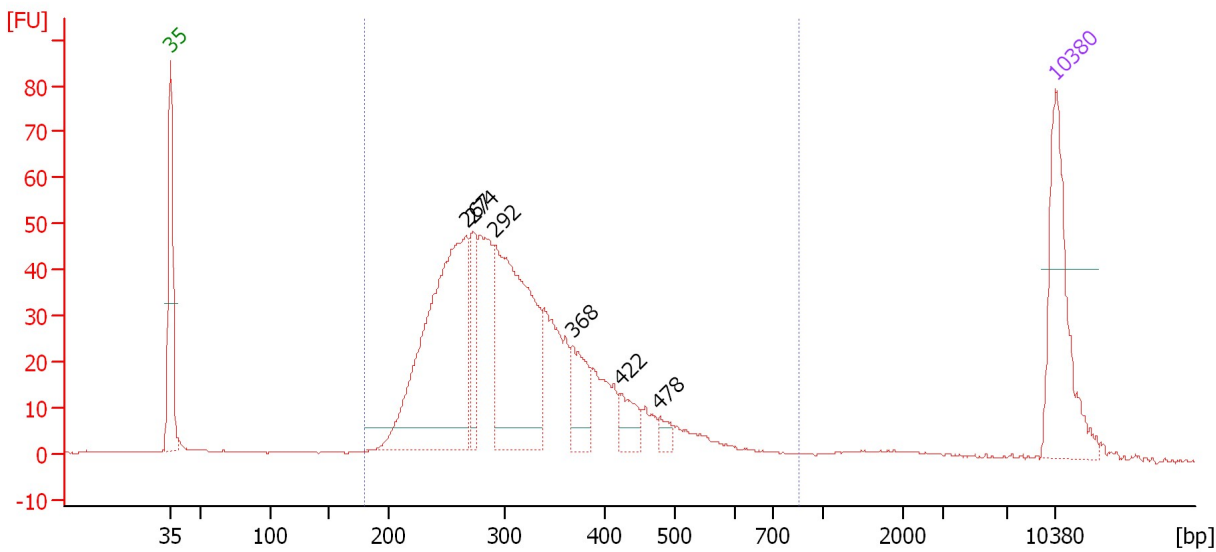
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
185	348	976	1,218.0	94	33.0	1,176.66	5,754.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...

INOS-U-3 [Poly A stranded RNA Library]



Overall Results for sample 4 : INOS-U-3

Number of peaks found: 6 Corr. Area 1: 947.0
 Noise: 0.2

Peak table for sample 4 : INOS-U-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	267	279.69	1,585.1	
3	274	45.82	253.7	
4	292	218.77	1,133.5	
5	368	40.57	167.0	
6	422	21.73	78.1	
7	478	8.75	27.7	
8	10,380	75.00	10.9	Upper Marker

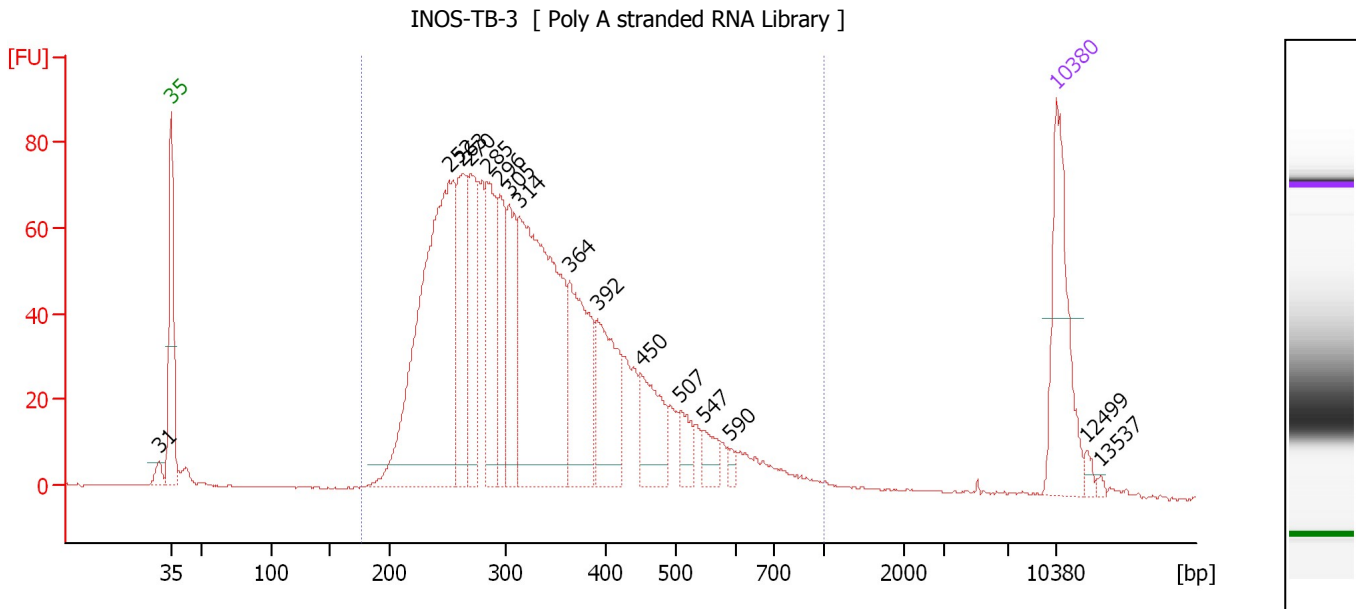
Region table for sample 4 : INOS-U-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
180	324	856	947.0	93	27.3	931.84	4,724.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : INOS-TB-3

Number of peaks found: 16 Corr. Area 1: 1,720.7
 Noise: 0.2

Peak table for sample 5 : INOS-TB-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	252	383.02	2,304.2	
4	263	95.19	547.4	
5	270	93.24	522.5	
6	285	97.00	516.4	
7	296	71.39	365.8	
8	305	80.60	400.7	
9	314	306.35	1,478.7	
10	364	114.83	477.6	
11	392	89.62	346.3	
12	450	54.68	184.2	
13	507	20.62	61.7	
14	547	16.07	44.5	
15	590	5.03	12.9	
16	10,380	75.00	10.9	Upper Marker
17	12,499	0.00	0.0	
18	13,537	0.00	0.0	

Region table for sample 5 : INOS-TB-3

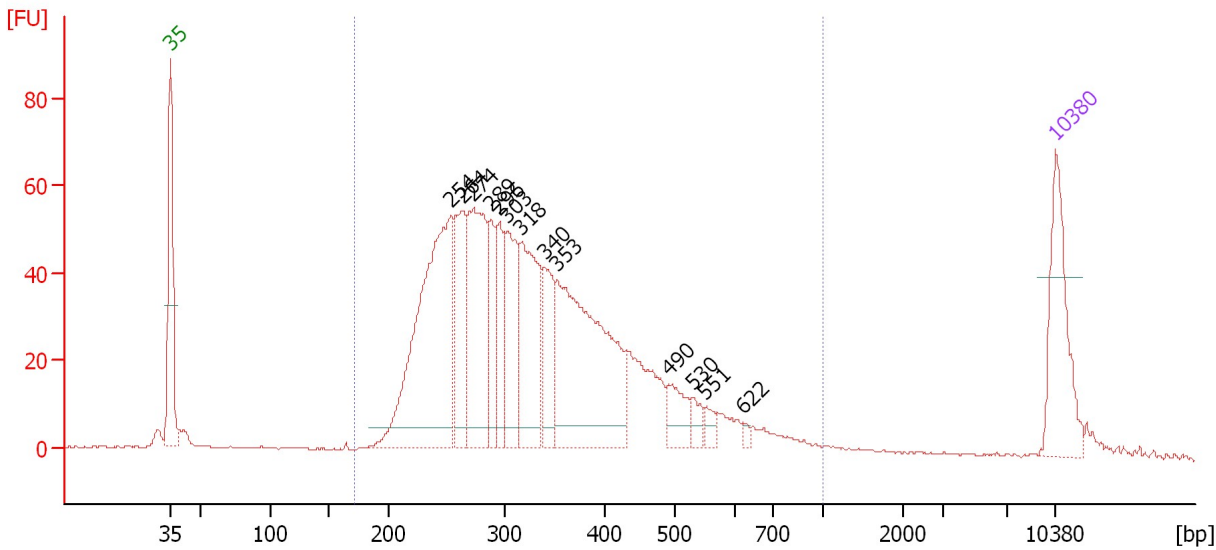
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
176	346	1,000	1,720.7	95	32.9	1,673.03	8,211.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...

INOS-TB+G-3 [Poly A stranded RNA Library]



Overall Results for sample 6 : INOS-TB+G-3

Number of peaks found: 13 Corr. Area 1: 1,314.4
 Noise: 0.2

Peak table for sample 6 : INOS-TB+G-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	254	342.19	2,041.4	
3	264	105.74	606.9	
4	274	175.59	972.6	
5	289	62.28	326.7	
6	296	59.98	307.3	
7	303	104.01	520.1	
8	318	142.19	678.5	
9	340	69.45	309.5	
10	353	277.93	1,193.8	
11	490	34.04	105.3	
12	530	14.03	40.1	
13	551	11.92	32.7	
14	622	4.07	9.9	
15	10,380	75.00	10.9	Upper Marker

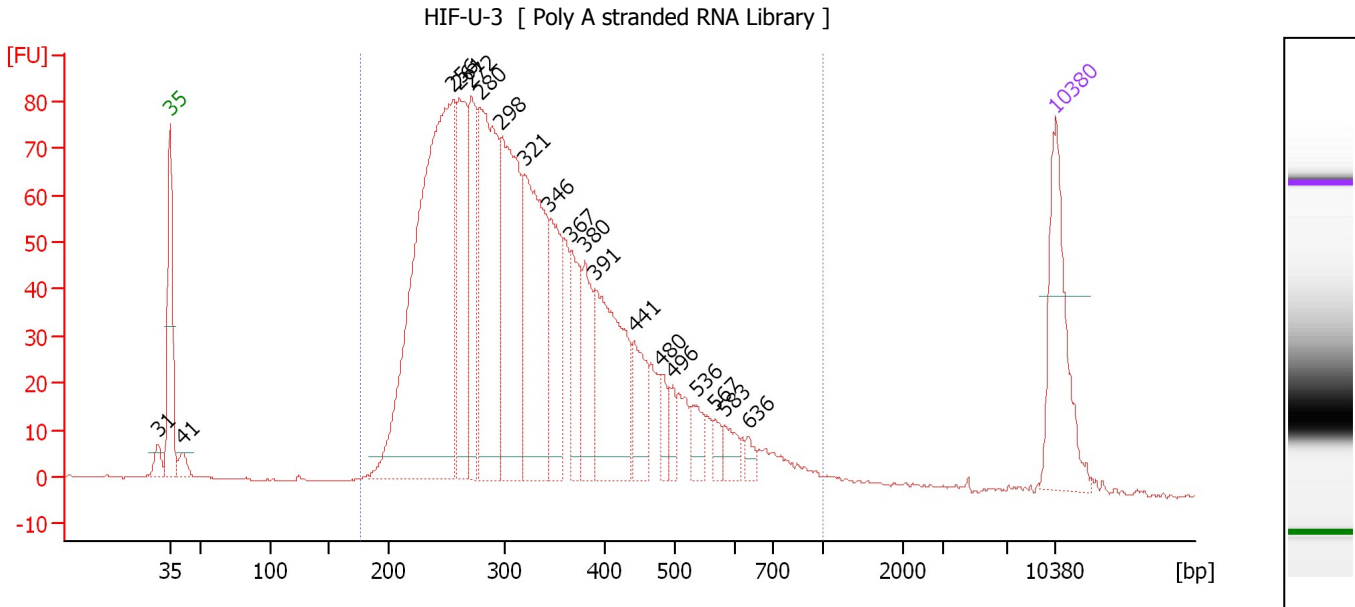
Region table for sample 6 : INOS-TB+G-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
172	348	1,000	1,314.4	94	33.5	1,621.82	7,939.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : HIF-U-3

Number of peaks found: 19 Corr. Area 1: 1,910.1
 Noise: 0.2

Peak table for sample 7 : HIF-U-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	41	13.15	482.6	
4	256	516.94	3,057.3	
5	261	130.62	758.3	
6	272	99.89	556.1	
7	280	204.00	1,105.5	
8	298	195.49	995.0	
9	321	197.13	931.7	
10	346	82.58	362.0	
11	367	55.91	230.8	
12	380	55.59	221.4	
13	391	135.36	524.7	
14	441	43.93	150.8	
15	480	16.17	51.0	
16	496	14.32	43.8	
17	536	19.87	56.2	
18	567	10.29	27.5	
19	583	14.38	37.4	
20	636	6.85	16.3	
21	10,380	75.00	10.9	Upper Marker

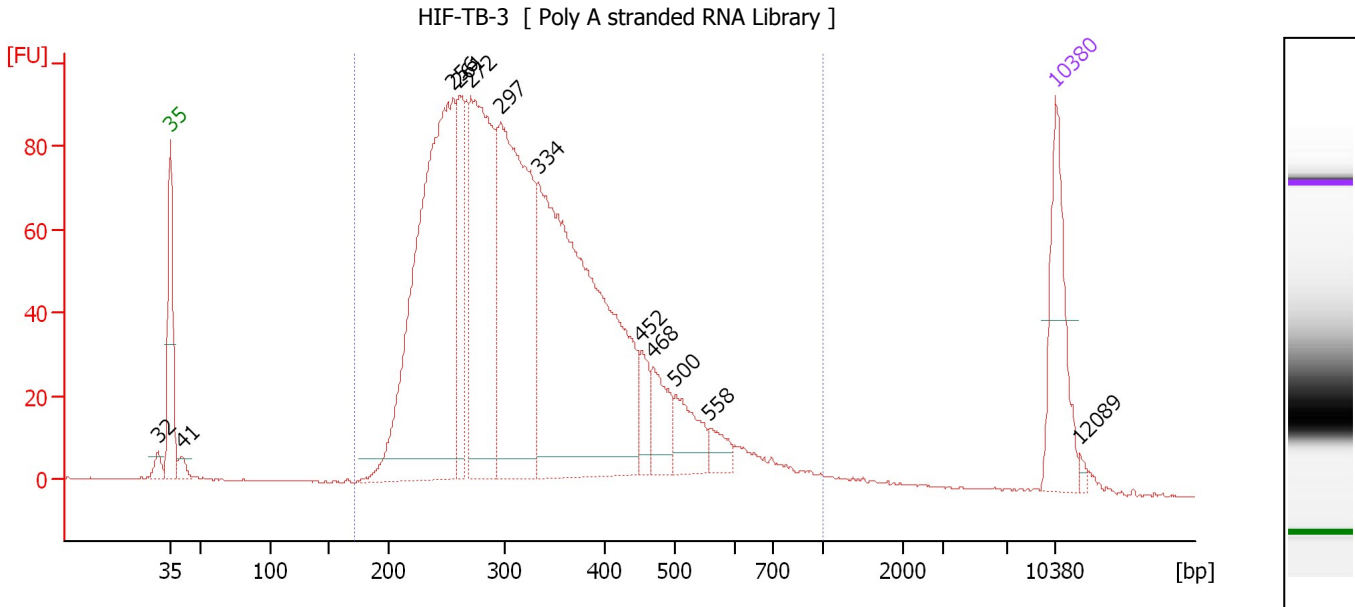
Region table for sample 7 : HIF-U-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
176	343	1,000	1,910.1	96	33.8	2,032.39	10,089.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : HIF-TB-3

Number of peaks found: 12 Corr. Area 1: 2,140.9
 Noise: 0.1

Peak table for sample 8 : HIF-TB-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	41	13.14	489.2	
4	256	555.81	3,288.0	
5	261	105.33	610.3	
6	272	317.97	1,773.5	
7	297	377.11	1,921.5	
8	334	569.53	2,580.0	
9	452	30.27	101.4	
10	468	43.67	141.4	
11	500	46.21	140.0	
12	558	18.73	50.8	
13	10,380	75.00	10.9	Upper Marker
14	12,089	0.00	0.0	

Region table for sample 8 : HIF-TB-3

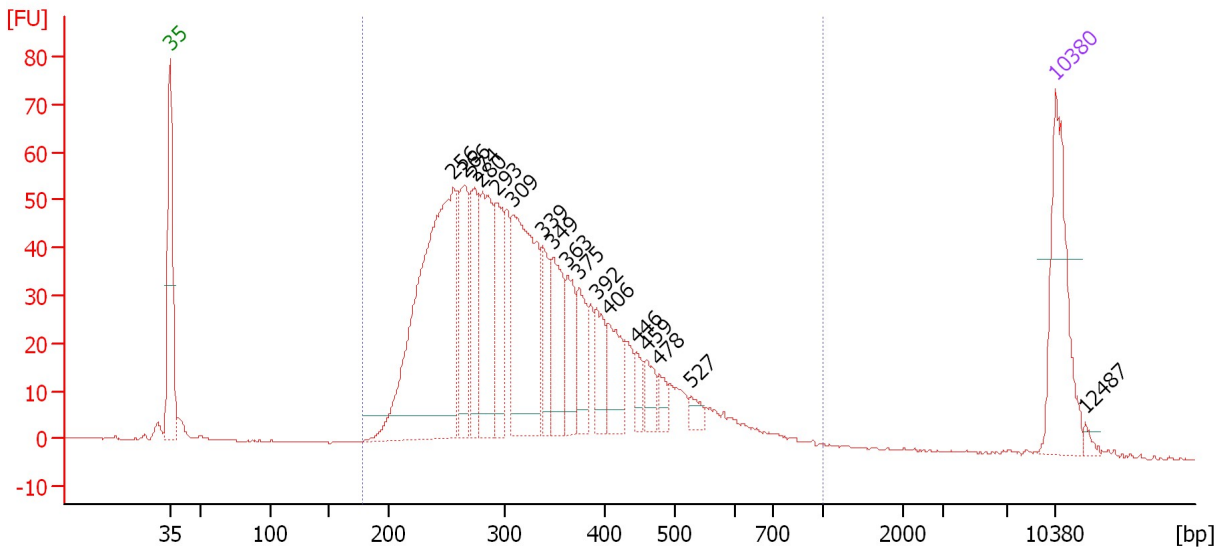
From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
171	340	1,000	2,140.9	96	32.6	2,198.67	10,929.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...

HIF-TB+G-3 [Poly A stranded RNA Library]



Overall Results for sample 9 : HIF-TB+G-3

Number of peaks found: 17 Corr. Area 1: 1,243.2
 Noise: 0.2

Peak table for sample 9 : HIF-TB+G-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	256	351.21	2,074.9	
3	266	85.57	487.2	
4	274	64.65	357.3	
5	280	102.02	553.0	
6	293	66.02	340.9	
7	309	166.49	816.0	
8	339	37.97	169.9	
9	349	63.43	275.3	
10	363	39.29	163.8	
11	375	38.78	156.7	
12	392	31.71	122.5	
13	406	40.86	152.3	
14	446	14.29	48.6	
15	459	18.30	60.4	
16	478	11.84	37.5	
17	527	8.95	25.7	
18	10,380	75.00	10.9	Upper Marker
19	12,487	0.00	0.0	

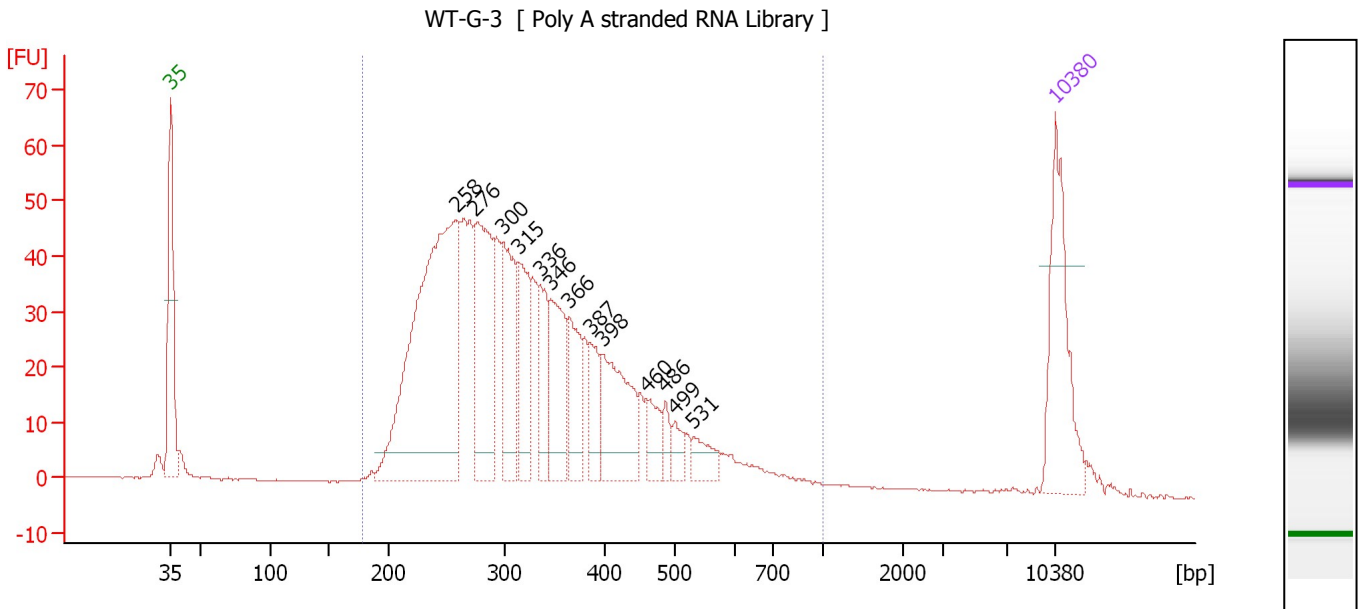
Region table for sample 9 : HIF-TB+G-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
179	340	1,000	1,243.2	96	32.0	1,434.68	7,106.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : WT-G-3

Number of peaks found: 13 Corr. Area 1: 1,106.1
 Noise: 0.1

Peak table for sample 10 : WT-G-3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	258	392.72	2,302.9	
3	276	143.30	787.7	
4	300	91.78	463.7	
5	315	71.87	346.0	
6	336	52.61	237.4	
7	346	75.61	330.8	
8	366	50.63	209.9	
9	387	30.99	121.5	
10	398	85.69	325.9	
11	460	23.88	78.7	
12	486	13.27	41.4	
13	499	13.03	39.6	
14	531	18.83	53.8	
15	10,380	75.00	10.9	Upper Marker

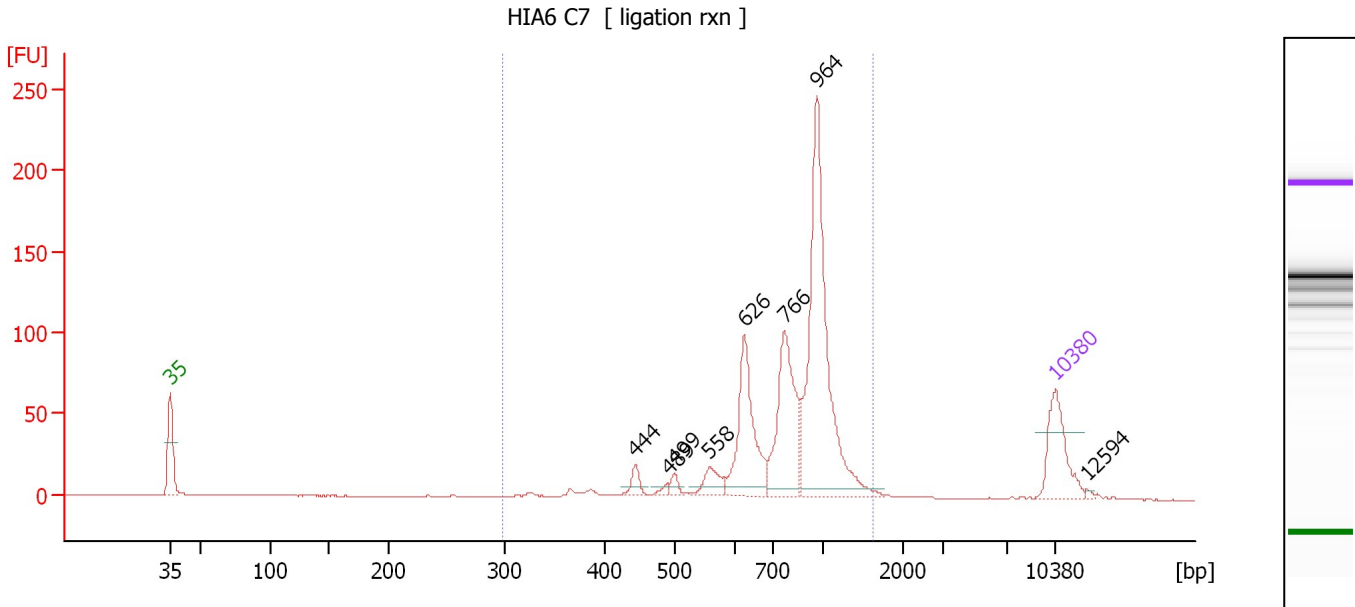
Region table for sample 10 : WT-G-3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
178	338	1,000	1,106.1	95	32.3	1,417.47	7,092.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : HIA6 C7

Number of peaks found: 8
 Noise: 0.1
 Corr. Area 1: 858.4

Peak table for sample 11 : HIA6 C7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	444	18.74	64.0	
3	489	6.34	19.6	
4	499	12.46	37.8	
5	558	31.09	84.4	
6	626	154.50	374.2	
7	766	177.69	351.4	
8	964	375.08	589.8	
9	10,380	75.00	10.9	Upper Marker
10	12,594	0.00	0.0	

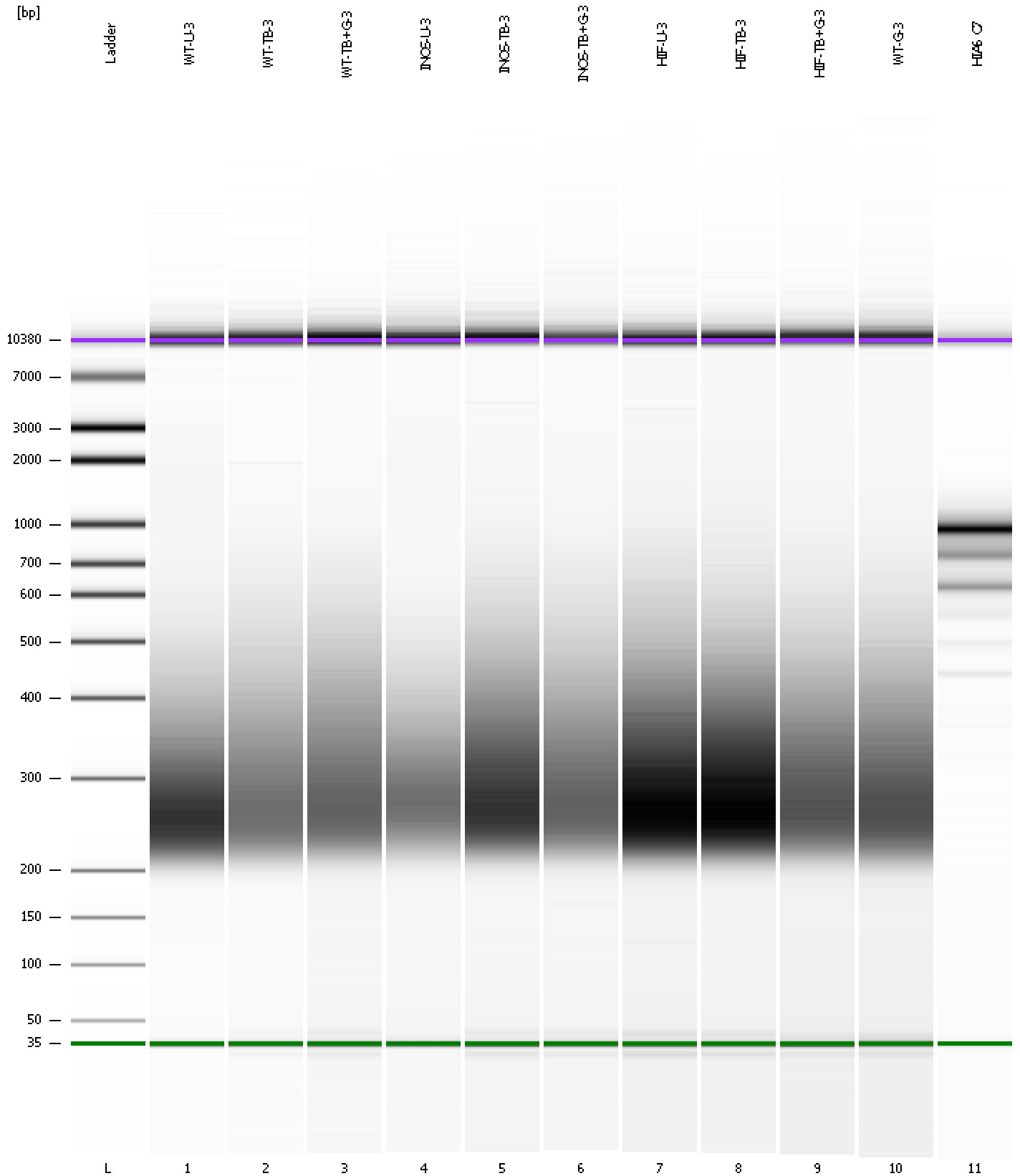
Region table for sample 11 : HIA6 C7

From [bp]	Average Size [bp]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
298	841	1,615	858.4	96	25.9	828.93	1,648.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
Modified: 12/8/2014 11:01:55 AM

Gel Image

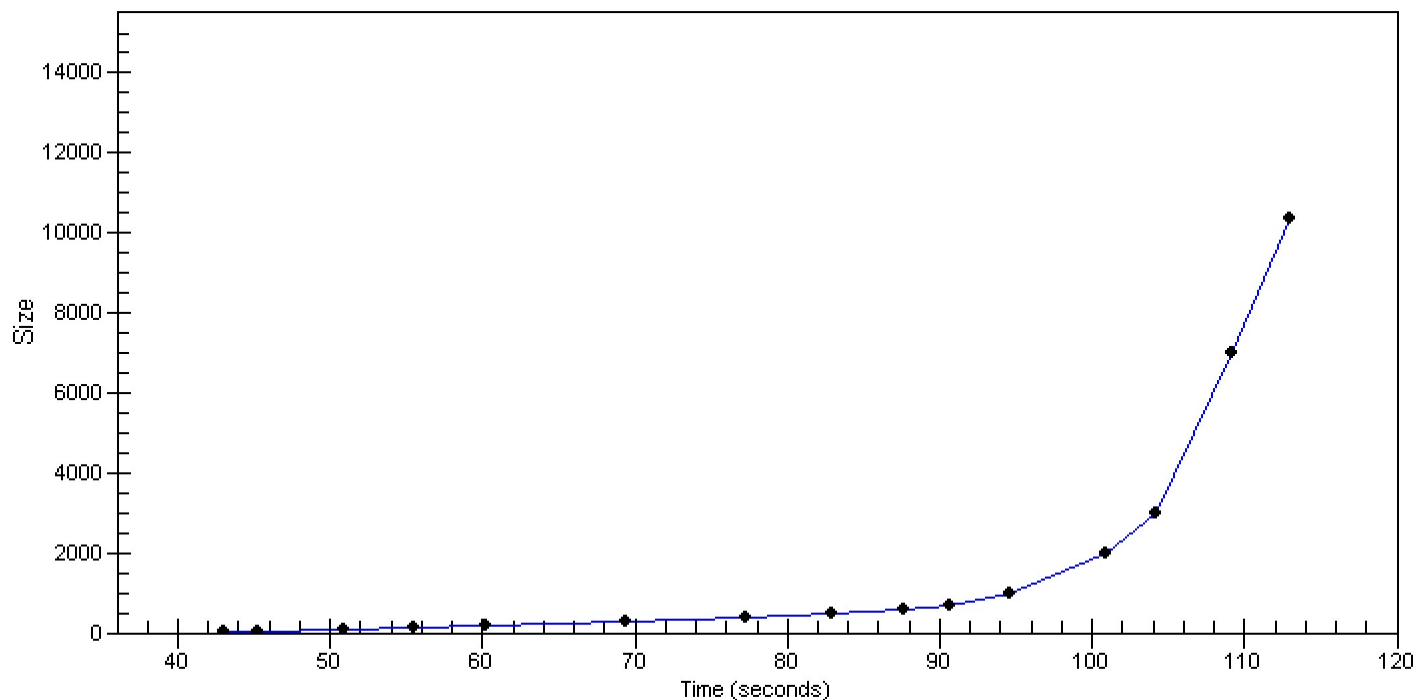


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
Modified: 12/8/2014 11:01:55 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad

Created: 12/8/2014 10:16:56 AM
 Modified: 12/8/2014 11:01:55 AM

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		12/8/2014 10:57:23 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-12-08\2014-12-08_002.xad)		Instrument	Run		12/8/2014 10:17:01 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/8/2014 10:17:01 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/8/2014 10:17:01 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/8/2014 10:17:01 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/8/2014 10:17:01 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/8/2014 10:17:01 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/8/2014 10:17:01 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1