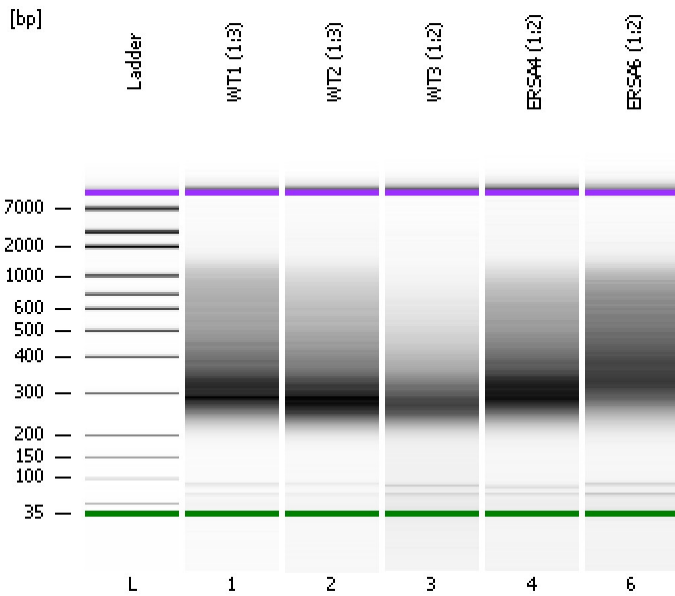


Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 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

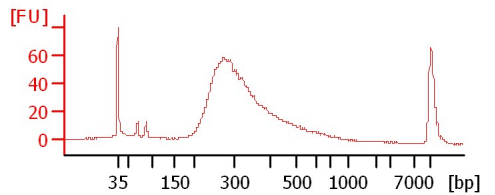
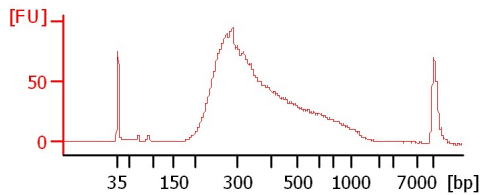
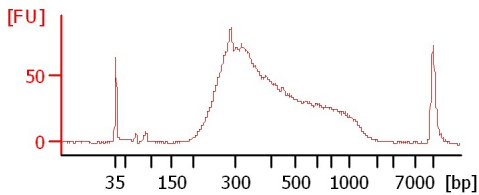
Chip Information:

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

WT1 (1:3)

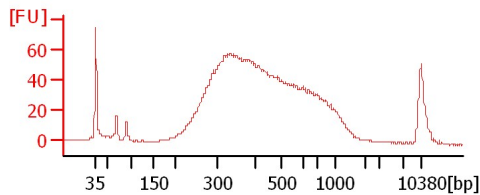
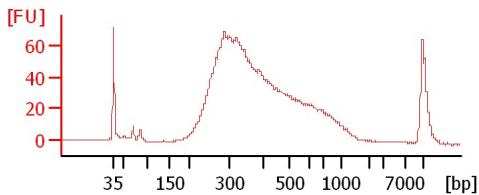
WT2 (1:3)

WT3 (1:2)



ERSA4 (1:2)

ERSA6 (1:2)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
Modified: 4/17/2014 11:20:27 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WT1 (1:3)		<input type="checkbox"/>				
WT2 (1:3)		<input type="checkbox"/>				
WT3 (1:2)		<input type="checkbox"/>				
ERSA4 (1:2)		<input type="checkbox"/>				
ERSA6 (1:2)		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>				

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 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

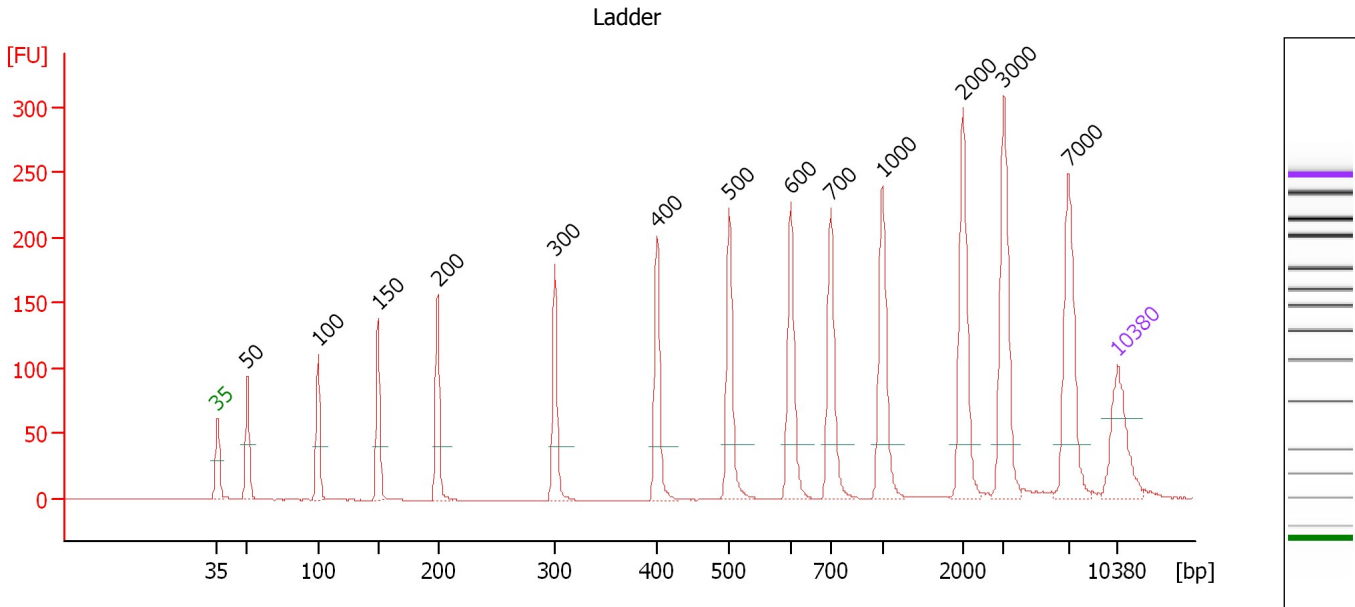
Ladder

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:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

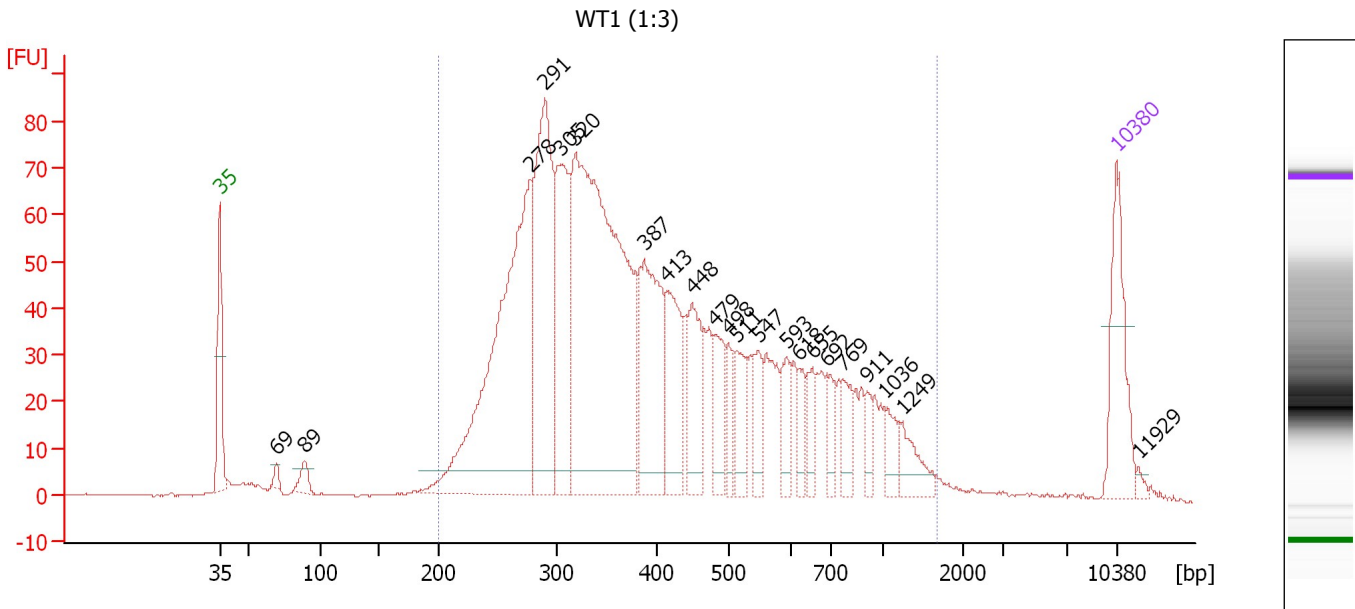
Peak table for Ladder

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	45.32	50	150.00	4,545.5	Ladder Peak
3	50.84	100	150.00	2,272.7	Ladder Peak
4	55.48	150	150.00	1,515.2	Ladder Peak
5	60.13	200	150.00	1,136.4	Ladder Peak
6	69.25	300	150.00	757.6	Ladder Peak
7	77.17	400	150.00	568.2	Ladder Peak
8	82.81	500	150.00	454.5	Ladder Peak
9	87.58	600	150.00	378.8	Ladder Peak
10	90.69	700	150.00	324.7	Ladder Peak
11	94.71	1,000	150.00	227.3	Ladder Peak
12	100.97	2,000	150.00	113.6	Ladder Peak
13	104.17	3,000	150.00	75.8	Ladder Peak
14	109.18	7,000	150.00	32.5	Ladder Peak
15	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WT1 (1:3)

Number of peaks found: 22 Corr. Area 1: 2,009.0
 Noise: 0.2

Peak table for sample 1 : WT1 (1:3)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	47.45	69	9.49	207.5	
3	49.66	89	20.38	345.7	
4	67.26	278	515.79	2,808.9	
5	68.39	291	297.81	1,553.1	
6	69.63	305	181.29	901.0	
7	70.80	320	683.55	3,240.8	
8	76.17	387	178.53	698.3	
9	77.92	413	103.63	380.0	
10	79.87	448	77.53	262.3	
11	81.62	479	53.86	170.4	
12	82.70	498	30.58	93.0	
13	83.33	511	44.93	133.3	
14	85.03	547	36.75	101.9	
15	87.24	593	32.26	82.4	
16	88.15	618	23.65	57.9	
17	89.28	655	28.32	65.5	
18	90.44	692	25.60	56.1	
19	91.61	769	33.04	65.1	
20	93.52	911	17.28	28.7	
21	94.94	1,036	23.35	34.2	
22	96.27	1,249	30.19	36.6	
23	113.00	10,380	75.00	10.9	Upper Marker
24	114.75	11,929	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
Modified: 4/17/2014 11:20:27 AM

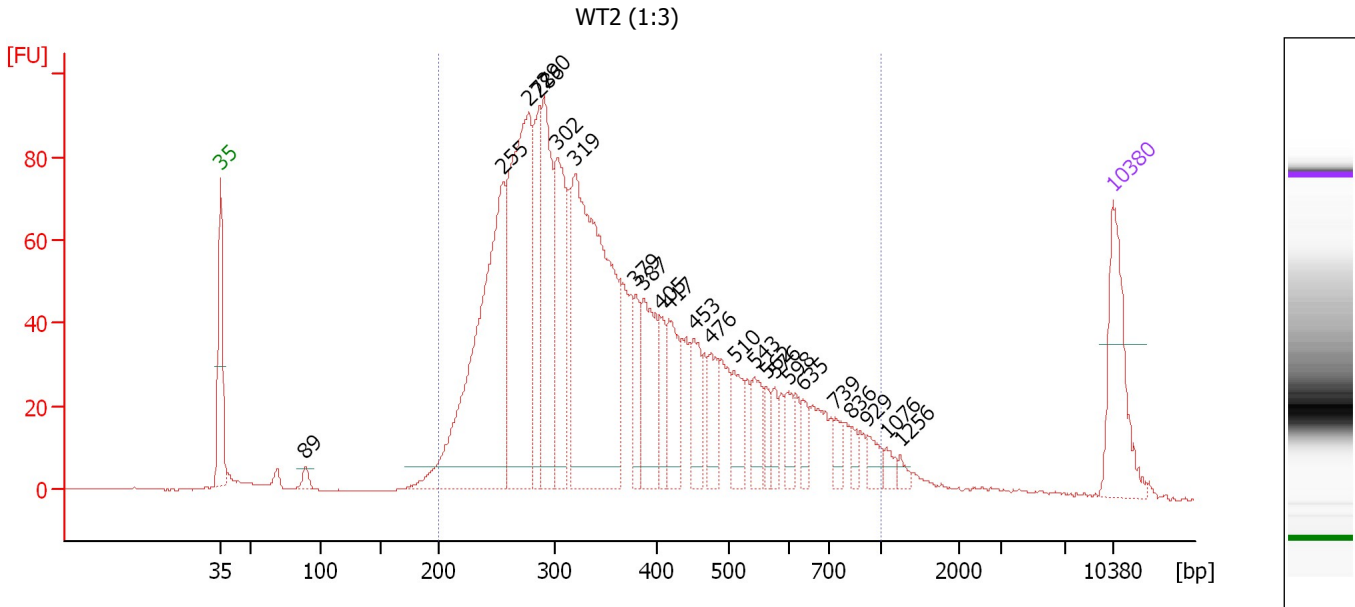
Electropherogram Summary Continued ...**... Region table for sample 1 : WT1 (1:3)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,674	448	11,621.5	2,743.07	 2,009.0	96	51.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WT2 (1:3)

Number of peaks found: 24 Corr. Area 1: 2,132.1
 Noise: 0.1

Peak table for sample 2 : WT2 (1:3)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	49.65	89	10.95	186.0	
3	65.16	255	421.05	2,499.8	
4	67.13	277	354.59	1,941.4	
5	68.01	286	119.48	632.2	
6	68.38	290	170.94	891.6	
7	69.39	302	153.56	771.1	
8	70.77	319	444.60	2,110.8	
9	75.53	379	39.56	158.0	
10	76.16	387	98.39	385.0	
11	77.46	405	33.33	124.7	
12	78.13	417	67.13	244.0	
13	80.13	453	46.20	154.7	
14	81.43	476	41.53	132.3	
15	83.27	510	39.05	116.1	
16	84.86	543	32.36	90.3	
17	85.78	562	16.52	44.5	
18	86.45	576	15.85	41.7	
19	87.49	598	21.68	54.9	
20	88.66	635	14.55	34.7	
21	91.21	739	12.91	26.5	
22	92.51	836	10.52	19.1	
23	93.76	929	14.90	24.3	
24	95.19	1,076	9.05	12.7	
25	96.32	1,256	5.26	6.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary Continued ...

... Peak table for sample 2 : WT2 (1:3)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
26	113.00	10,380	75.00	10.9	Upper Marker

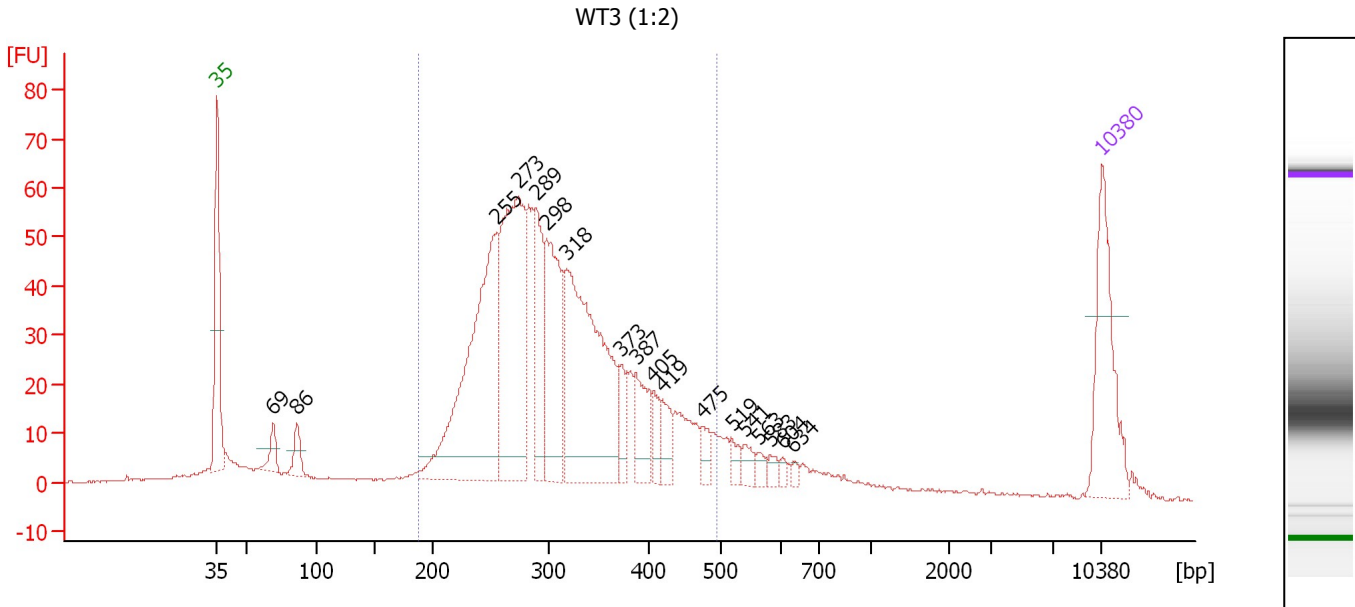
Region table for sample 2 : WT2 (1:3)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	384	11,827.9	2,562.29	2,132.1	95	38.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : WT3 (1:2)

Number of peaks found: 18 Corr. Area 1: 1,092.2
 Noise: 0.1

Peak table for sample 3 : WT3 (1:2)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	47.47	69	22.38	488.0	
3	49.33	86	23.36	410.1	
4	65.14	255	298.62	1,774.8	
5	66.83	273	259.65	1,438.8	
6	68.26	289	87.23	457.1	
7	69.06	298	127.21	647.0	
8	70.66	318	273.94	1,305.9	
9	75.01	373	23.42	95.2	
10	76.14	387	45.97	179.9	
11	77.45	405	19.20	71.8	
12	78.25	419	22.26	80.4	
13	81.42	475	14.48	46.2	
14	83.73	519	10.11	29.5	
15	84.75	541	11.09	31.1	
16	85.80	563	7.88	21.2	
17	86.77	583	6.75	17.5	
18	87.70	604	4.16	10.4	
19	88.63	634	3.82	9.1	
20	113.00	10,380	75.00	10.9	Upper Marker

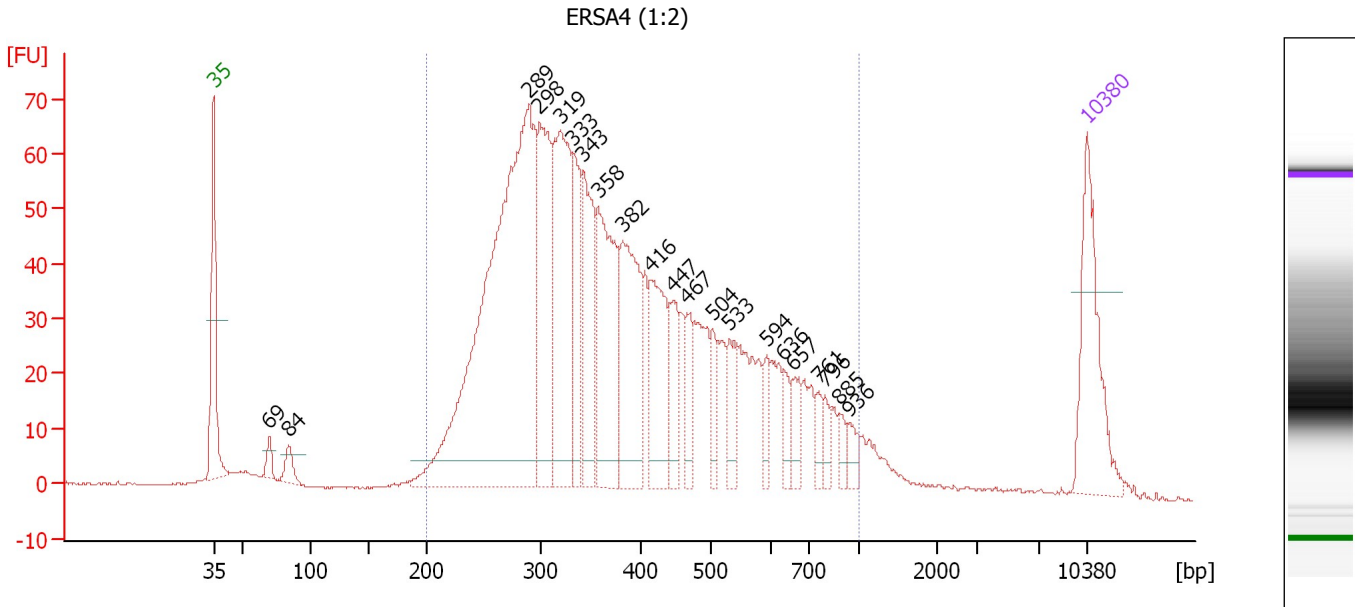
Region table for sample 3 : WT3 (1:2)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
188	496	312	7,317.7	1,425.58	1,092.2	82	21.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : ERS4 (1:2)

Number of peaks found: 21 Corr. Area 1: 1,704.2
 Noise: 0.2


Peak table for sample 4 : ERS4 (1:2)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	47.44	69	13.23	289.4	
3	49.03	84	18.38	333.2	
4	68.26	289	623.56	3,267.9	
5	69.11	298	153.03	776.8	
6	70.78	319	187.65	890.4	
7	71.85	333	78.16	355.9	
8	72.66	343	102.11	451.0	
9	73.81	358	150.93	639.5	
10	75.78	382	126.44	501.0	
11	78.09	416	88.05	320.5	
12	79.84	447	44.93	152.2	
13	80.95	467	29.56	95.9	
14	83.00	504	22.23	66.8	
15	84.37	533	29.29	83.3	
16	87.32	594	16.28	41.5	
17	88.68	636	15.53	37.0	
18	89.37	657	21.09	48.6	
19	91.50	761	13.28	26.5	
20	91.97	796	12.84	24.4	
21	93.17	885	9.40	16.1	
22	93.85	936	11.77	19.1	
23	113.00	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
Modified: 4/17/2014 11:20:27 AM

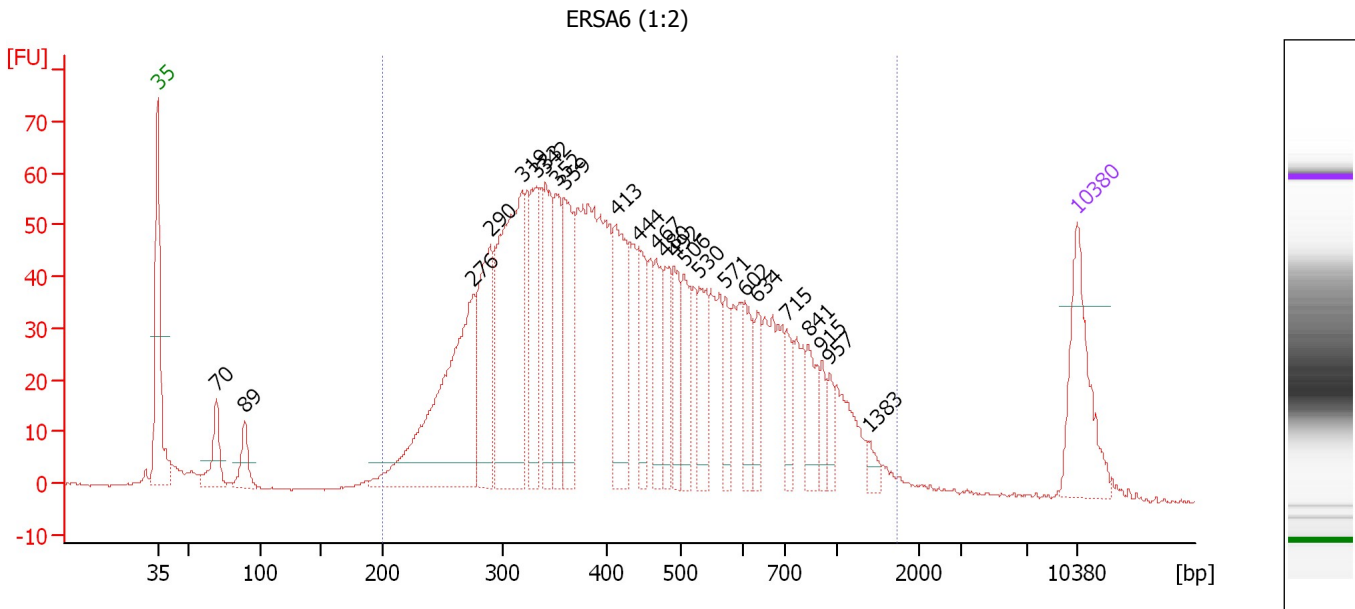
Electropherogram Summary Continued ...**... Region table for sample 4 : ERSA4 (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	403	9,112.3	2,079.02	 1,704.2	94	37.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : ERSa6 (1:2)

Number of peaks found: 24 Corr. Area 1: 1,836.8
 Noise: 0.2

Peak table for sample 6 : ERSa6 (1:2)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	43.00	35	125.00	5,411.3	Lower Marker
2	47.49	70	48.42	1,053.1	
3	49.61	89	35.45	604.6	
4	67.05	276	287.12	1,576.7	
5	68.35	290	134.15	700.6	
6	70.72	319	267.79	1,273.5	
7	71.89	333	83.91	381.4	
8	72.54	342	86.49	383.7	
9	73.36	352	78.08	336.2	
10	73.96	359	98.09	413.4	
11	77.89	413	109.74	402.8	
12	79.66	444	50.98	173.9	
13	80.96	467	54.36	176.3	
14	81.69	480	43.70	137.9	
15	82.34	492	45.48	140.2	
16	83.07	506	45.83	137.4	
17	84.24	530	55.57	158.9	
18	86.18	571	30.30	80.4	
19	87.65	602	42.97	108.1	
20	88.64	634	29.18	69.7	
21	90.89	715	25.90	54.9	
22	92.57	841	33.95	61.2	
23	93.57	915	16.80	27.8	
24	94.13	957	16.24	25.7	
25	97.11	1,383	9.24	10.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 AM

Electropherogram Summary Continued ...

... Peak table for sample 6 : ERSA6 (1:2)

Peak	Aligned Migration Time [s]	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations
26	113.00	10,380	75.00	10.9	Upper Marker

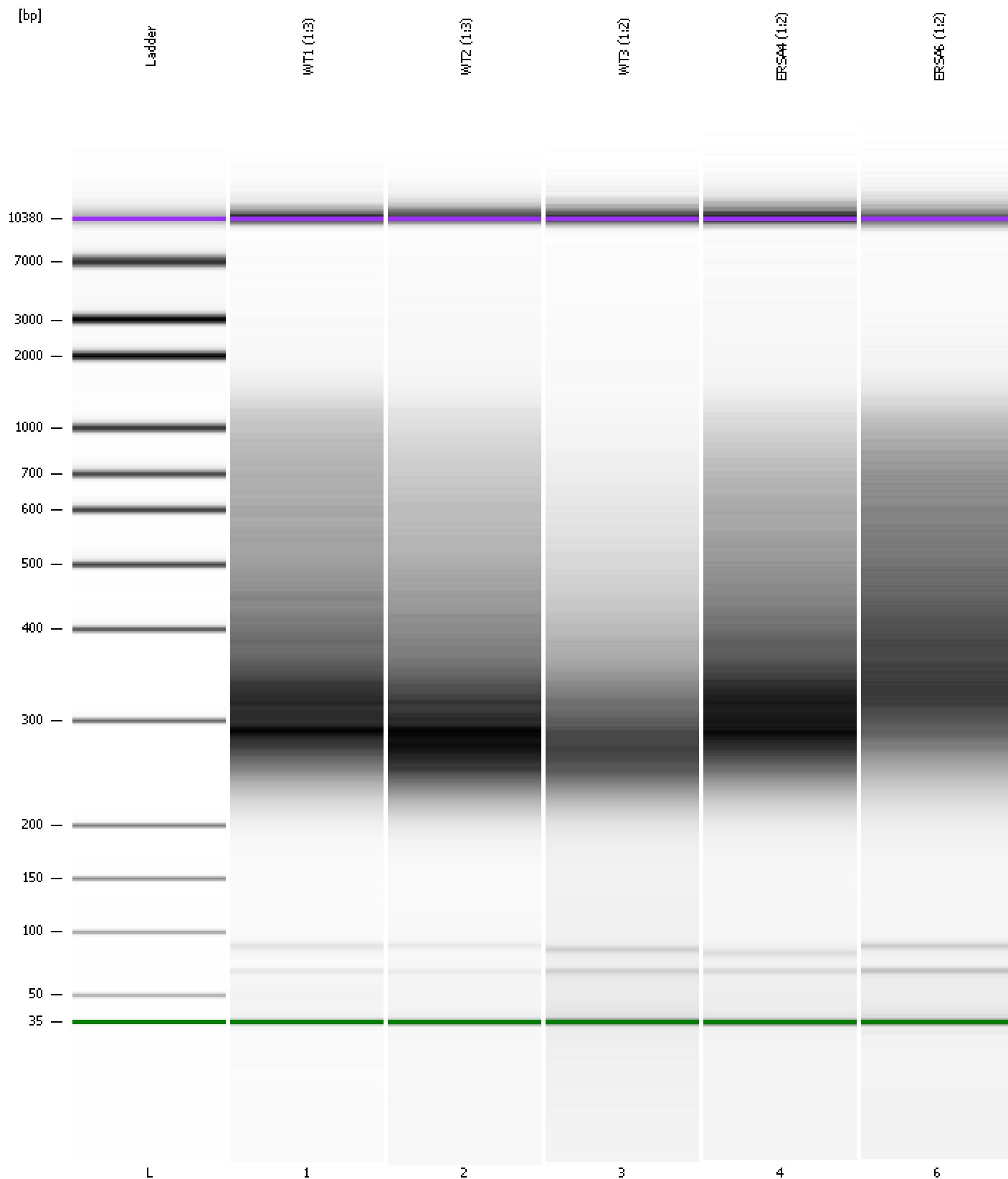
Region table for sample 6 : ERSA6 (1:2)

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ μ l]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,733	480	9,779.1	2,499.13	1,836.8	95	47.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
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Gel Image

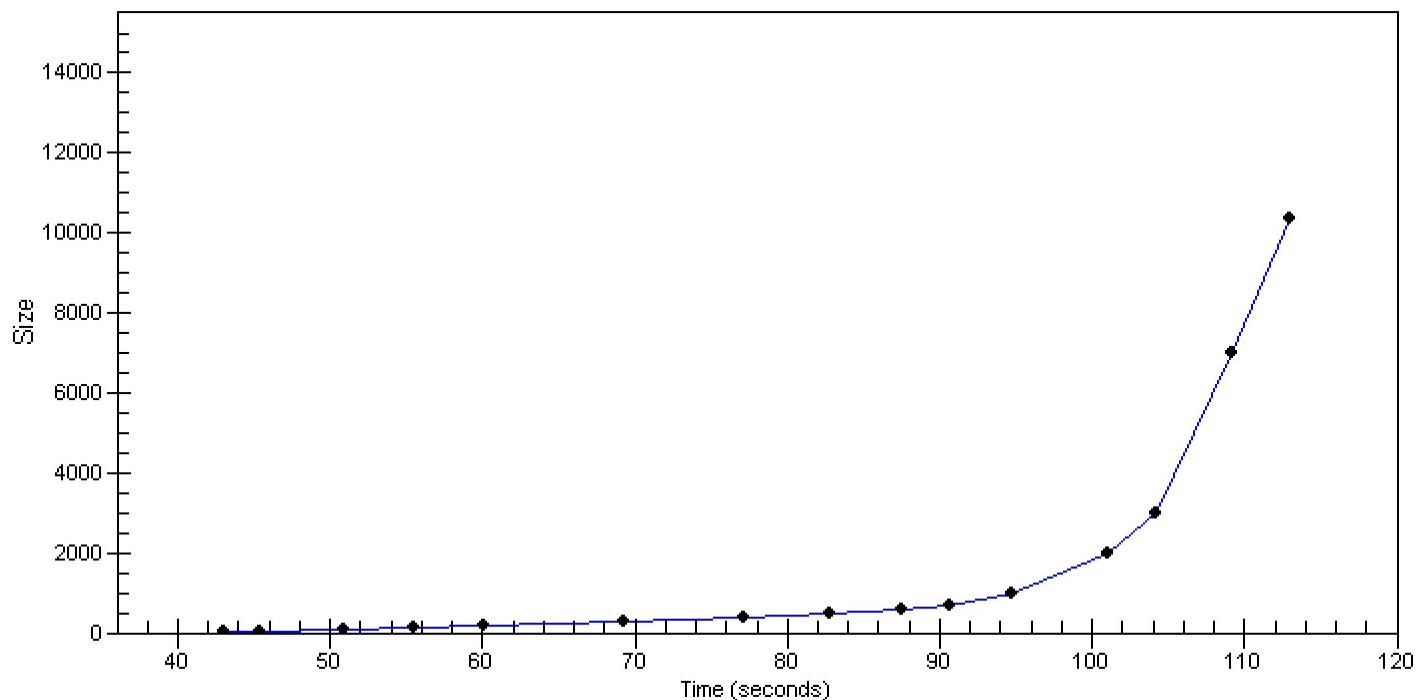


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
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Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ngs\Bioanalyzer\2014-04-17\2014-04-17_001-RIBO-STRANDED.xad

Created: 4/17/2014 10:30:40 AM
 Modified: 4/17/2014 11:20:27 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		4/17/2014 11:12:01 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-04-17\2014-04-17_001.xad)		Instrument	Run		4/17/2014 10:30:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/17/2014 10:30:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/17/2014 10:30:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/17/2014 10:30:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/17/2014 10:30:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/17/2014 10:30:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/17/2014 10:30:46 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1