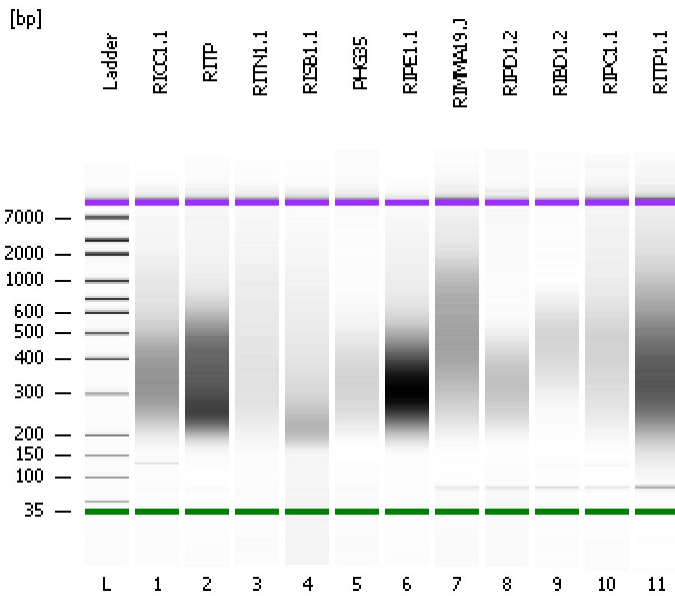


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
Modified: 8/22/2013 11:07:37 AM

Electrophoresis File Run Summary



Instrument Information:

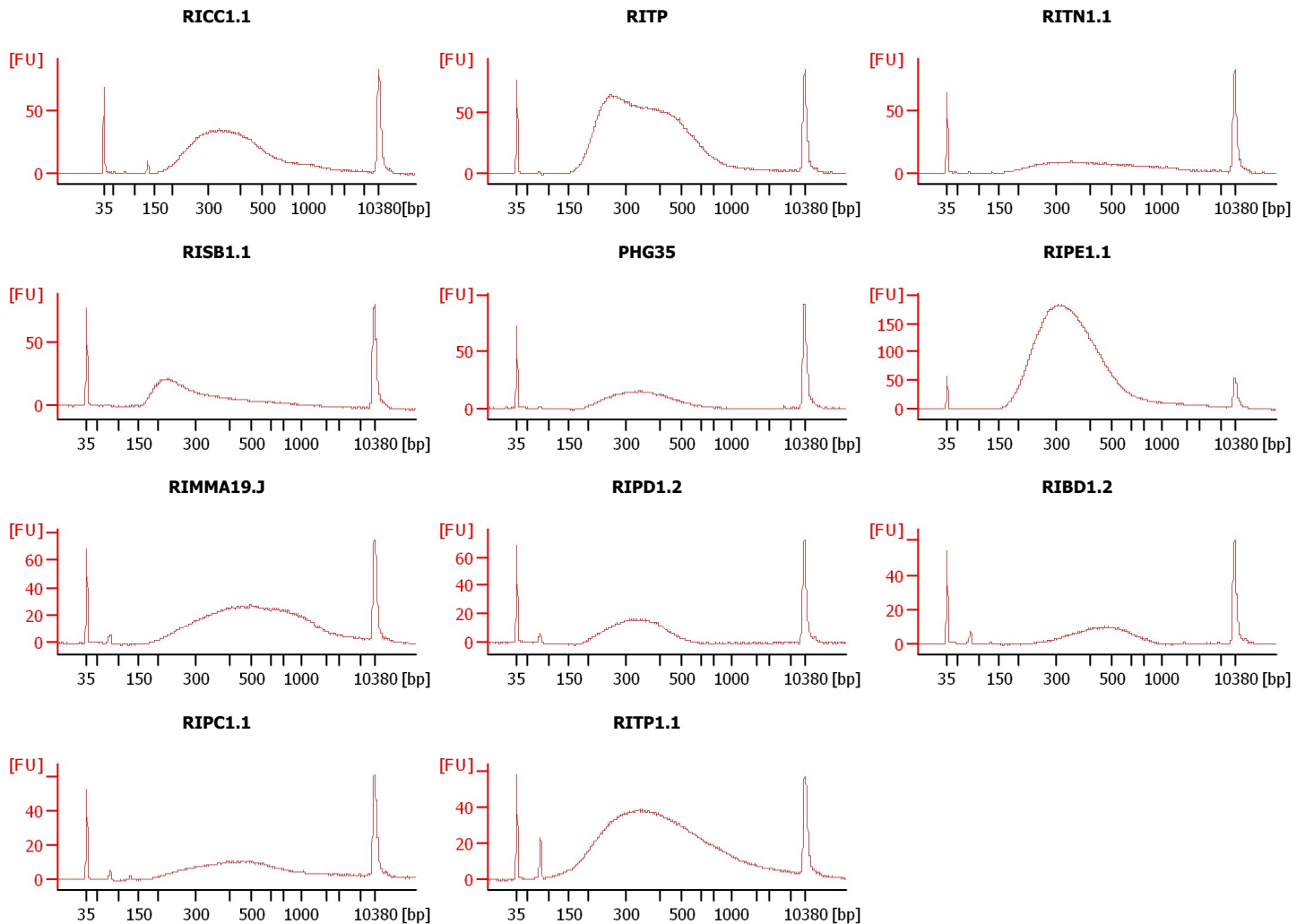
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
Modified: 8/22/2013 11:07:37 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
RICC1.1		<input type="checkbox"/>	✓			
RITP		<input type="checkbox"/>	✓			
RITN1.1		<input type="checkbox"/>	✓			
RISB1.1		<input type="checkbox"/>	✓			
PHG35		<input type="checkbox"/>	✓			
RIPE1.1		<input type="checkbox"/>	✓			
RIMMA19.J		<input type="checkbox"/>	✓			
RIPD1.2		<input type="checkbox"/>	✓			
RIBD1.2		<input type="checkbox"/>	✓			
RIPC1.1		<input type="checkbox"/>	✓			
RITP1.1		<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\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
Modified: 8/22/2013 11:07:37 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

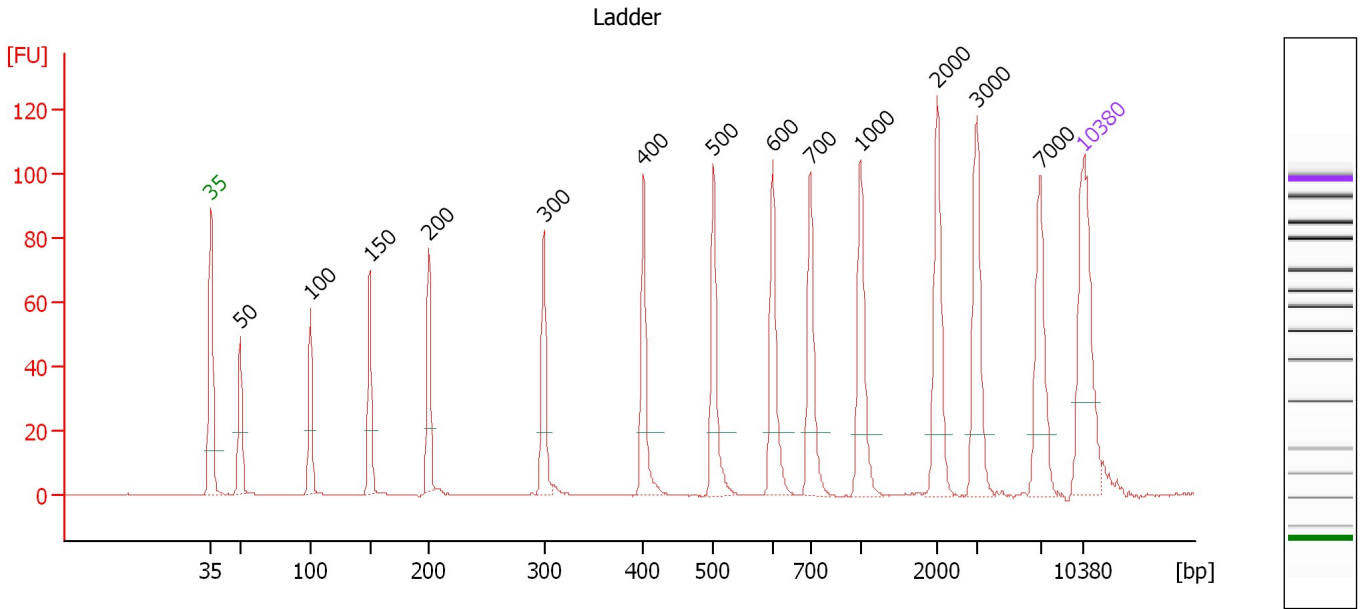
Ladder

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\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

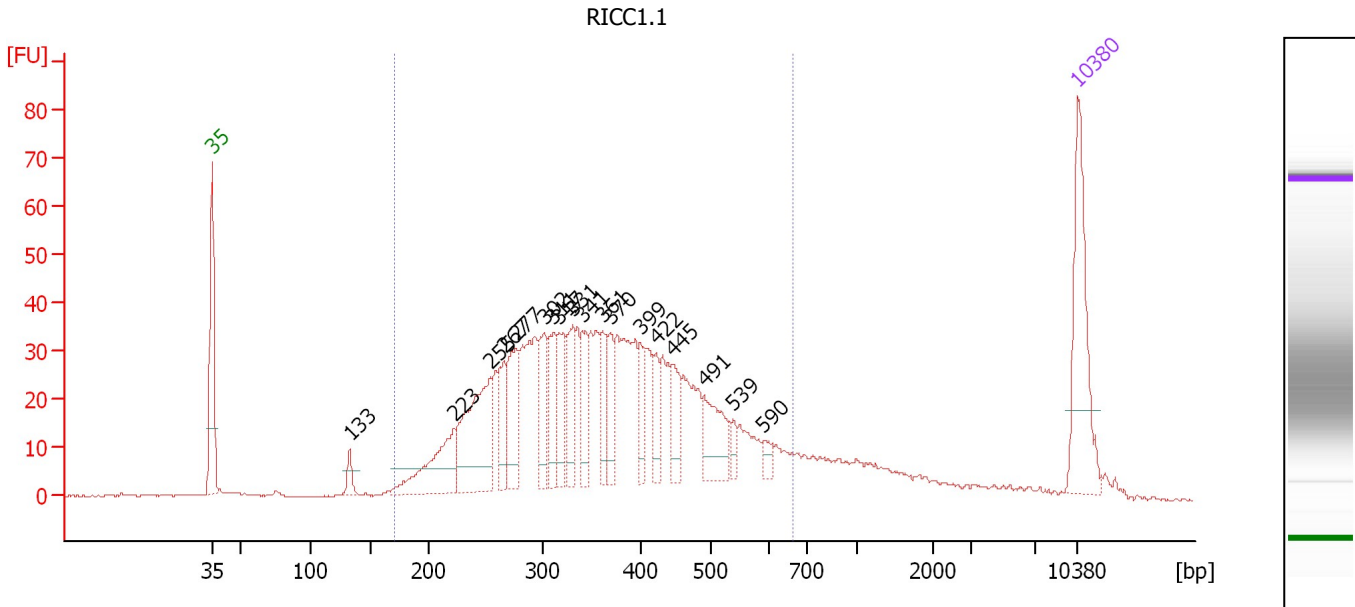
Peak table for Ladder

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\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
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Electropherogram Summary Continued ...



Overall Results for sample 1 : RICC1.1

Number of peaks found: 18 Corr. Area 1: 1,026.4
 Noise: 0.2

Peak table for sample 1 : RICC1.1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	133	13.59	154.7	
3	223	79.48	538.9	
4	255	125.65	747.4	
5	267	40.36	229.1	
6	277	62.06	339.3	
7	302	45.21	226.7	
8	311	47.24	229.9	
9	317	41.24	197.0	
10	331	46.12	211.0	
11	341	38.96	173.1	
12	361	34.45	144.6	
13	370	30.71	125.9	
14	399	28.54	108.4	
15	422	23.90	85.8	
16	445	30.60	104.2	
17	491	48.43	149.4	
18	539	9.51	26.8	
19	590	8.94	23.0	
20	10,380	75.00	10.9	Upper Marker

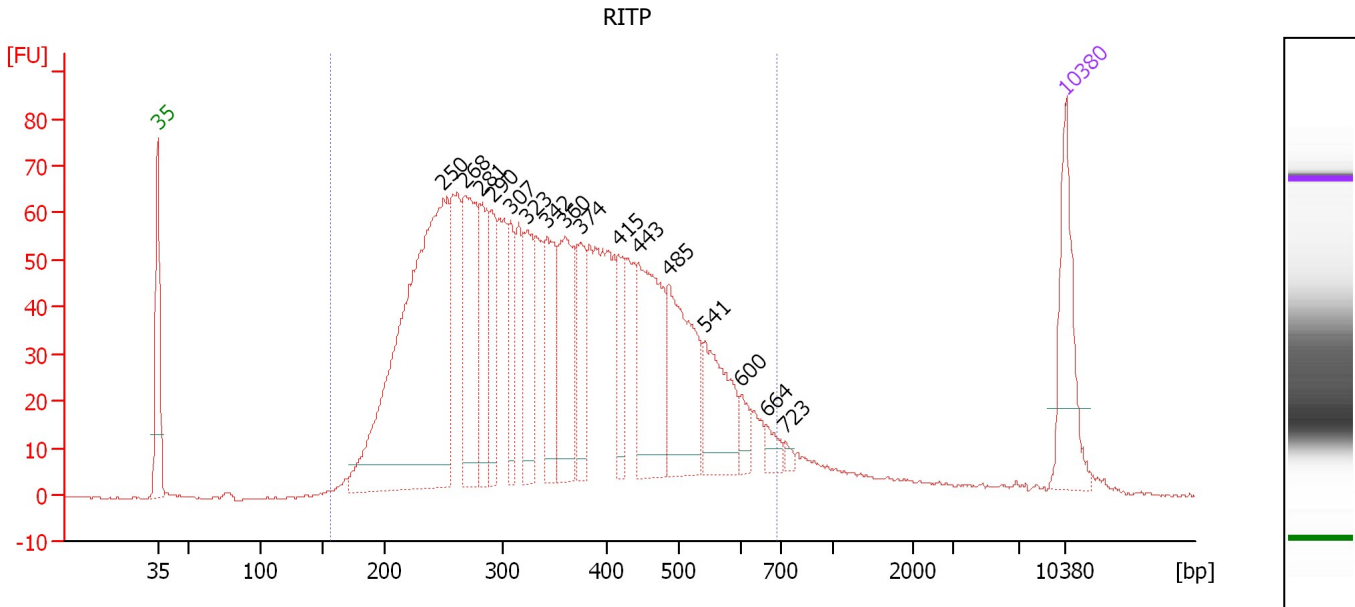
Region table for sample 1 : RICC1.1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
172	661	368	6,274.6	1,359.95	1,026.4	88	28.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
 Modified: 8/22/2013 11:07:37 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : RITP

Number of peaks found: 16 Corr. Area 1: 2,031.0
 Noise: 0.2

Peak table for sample 2 : RITP

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	250	606.21	3,675.2	
3	268	173.62	980.5	
4	281	98.18	530.3	
5	290	67.61	352.7	
6	307	61.88	305.5	
7	323	92.87	436.1	
8	342	97.66	432.4	
9	360	116.43	490.5	
10	374	59.20	240.0	
11	415	42.24	154.1	
12	443	152.84	522.3	
13	485	141.04	440.3	
14	541	91.09	255.0	
15	600	18.42	46.5	
16	664	13.62	31.1	
17	723	5.69	11.9	
18	10,380	75.00	10.9	Upper Marker

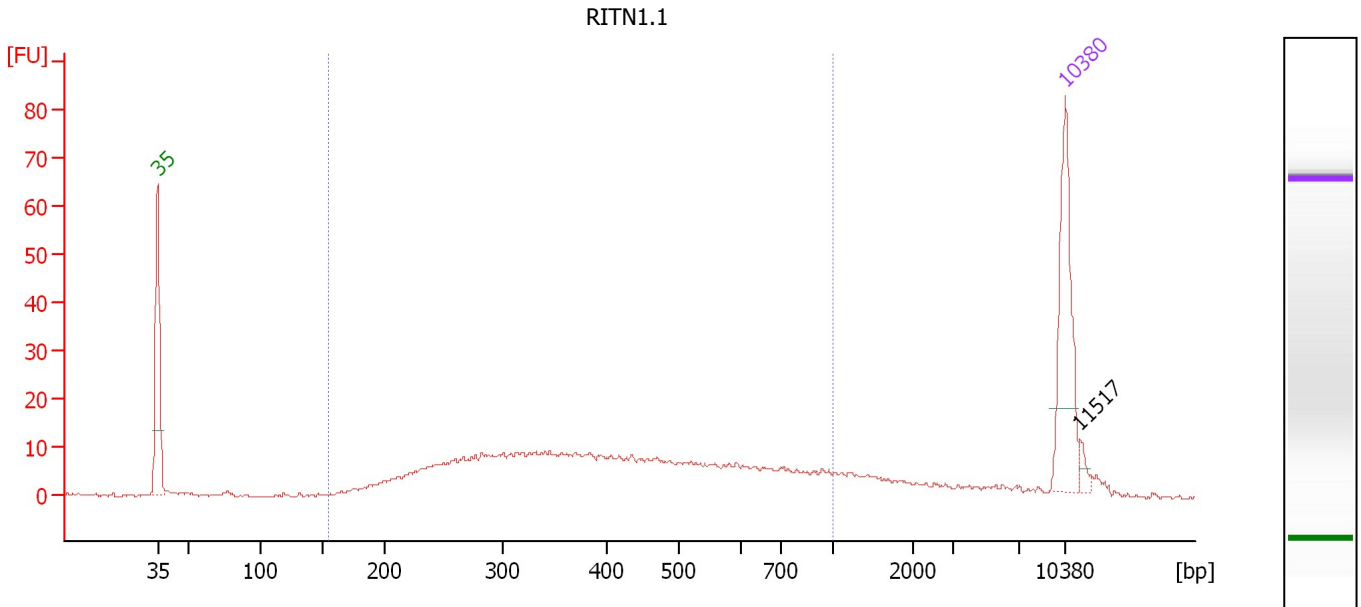
Region table for sample 2 : RITP

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
157	692	360	12,796.0	2,644.94	2,031.0	96	31.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 3 : RITN1.1

Number of peaks found: 1 Corr. Area 1: 331.2
 Noise: 0.3

Peak table for sample 3 : RITN1.1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker
3	11,517	0.00	0.0	

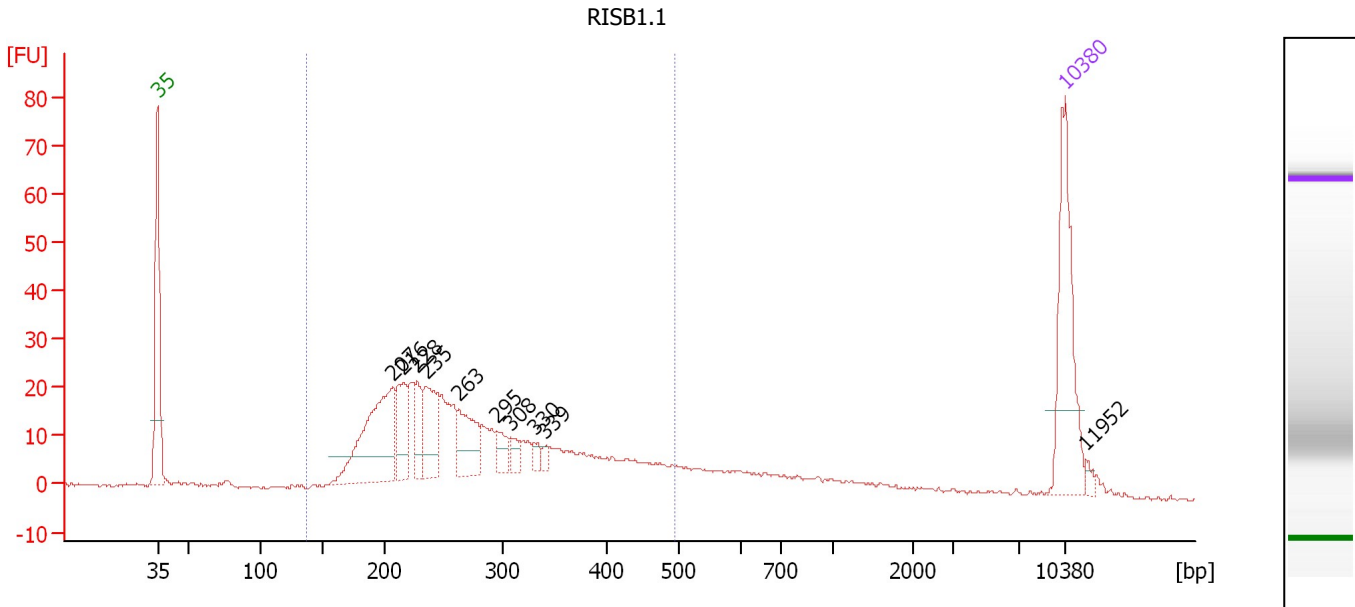
Region table for sample 3 : RITN1.1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
155	1,000	431	2,057.1	470.17	331.2	85	41.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
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Electropherogram Summary Continued ...



Overall Results for sample 4 : RISB1.1

Number of peaks found: 10 Corr. Area 1: 487.2
 Noise: 0.4

Peak table for sample 4 : RISB1.1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	207	129.90	949.6	
3	216	45.56	319.1	
4	228	26.96	179.0	
5	235	51.64	332.4	
6	263	47.68	275.1	
7	295	14.69	75.6	
8	308	9.65	47.6	
9	330	7.74	35.6	
10	339	5.64	25.2	
11	10,380	75.00	10.9	Upper Marker
12	11,952	0.00	0.0	

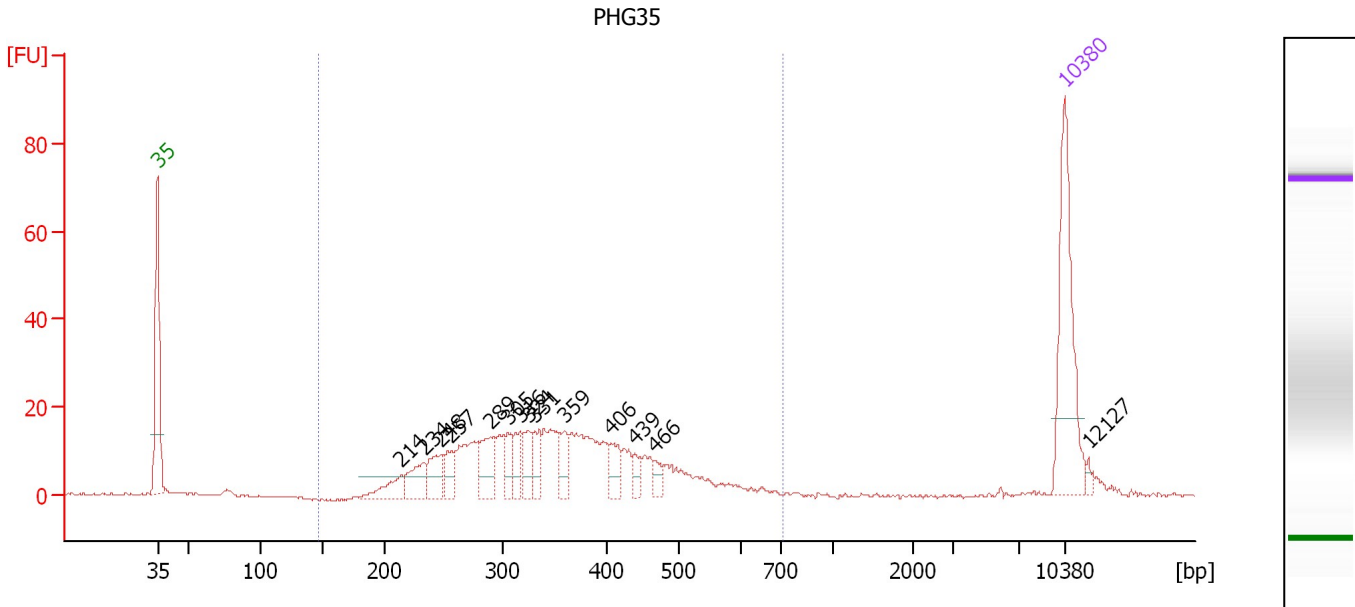
Region table for sample 4 : RISB1.1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
137	493	281	4,102.5	686.12	487.2	80	28.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 5 : PHG35

Number of peaks found: 14 Corr. Area 1: 372.2
 Noise: 0.2

Peak table for sample 5 : PHG35

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	214	22.78	161.0	
3	234	26.81	173.9	
4	248	26.54	161.9	
5	257	18.14	107.1	
6	289	30.71	160.9	
7	305	15.91	79.2	
8	316	16.90	81.0	
9	324	18.09	84.6	
10	331	17.84	81.6	
11	359	19.76	83.3	
12	406	17.63	65.8	
13	439	9.34	32.2	
14	466	8.54	27.8	
15	10,380	75.00	10.9	Upper Marker
16	12,127	0.00	0.0	

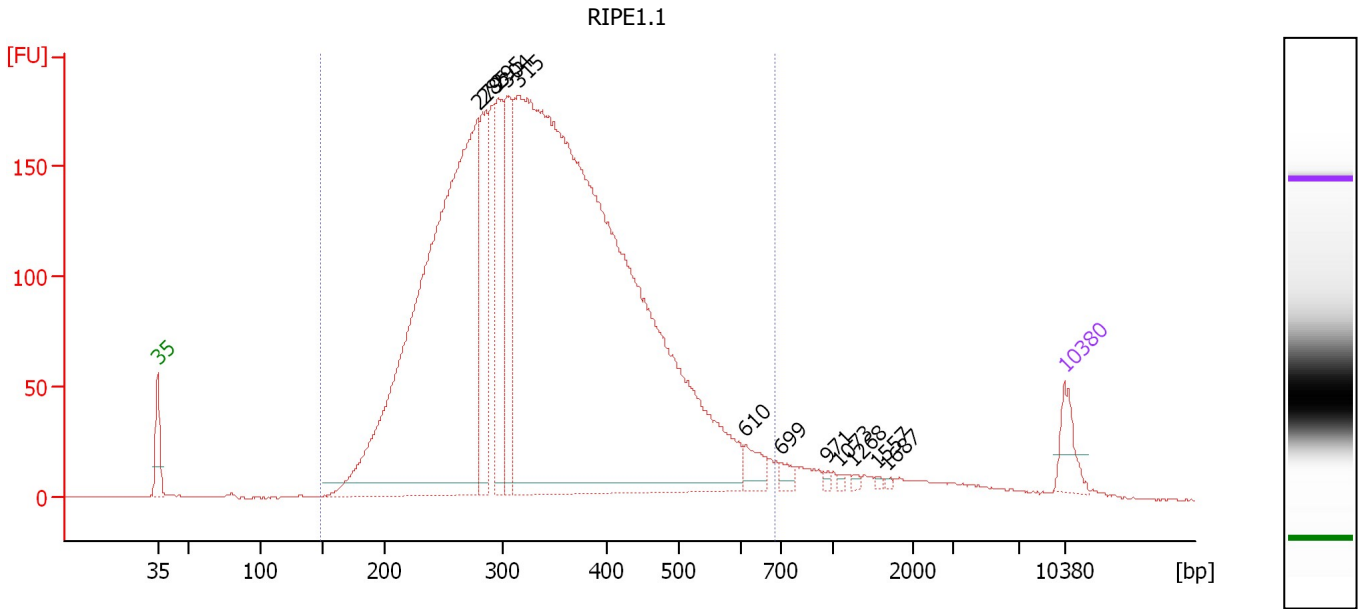
Region table for sample 5 : PHG35

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	716	355	2,136.6	457.47	372.2	95	25.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 6 : RIPE1.1

Number of peaks found: 12 Corr. Area 1: 4,738.5
 Noise: 0.2

Peak table for sample 6 : RIPE1.1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	279	2,975.70	16,180.2	
3	285	442.59	2,353.7	
4	295	420.51	2,156.2	
5	304	362.86	1,810.4	
6	315	5,734.02	27,597.9	
7	610	70.85	176.0	
8	699	27.51	59.6	
9	971	9.16	14.3	
10	1,073	7.00	9.9	
11	1,268	8.38	10.0	
12	1,557	5.46	5.3	
13	1,687	4.74	4.3	
14	10,380	75.00	10.9	Upper Marker

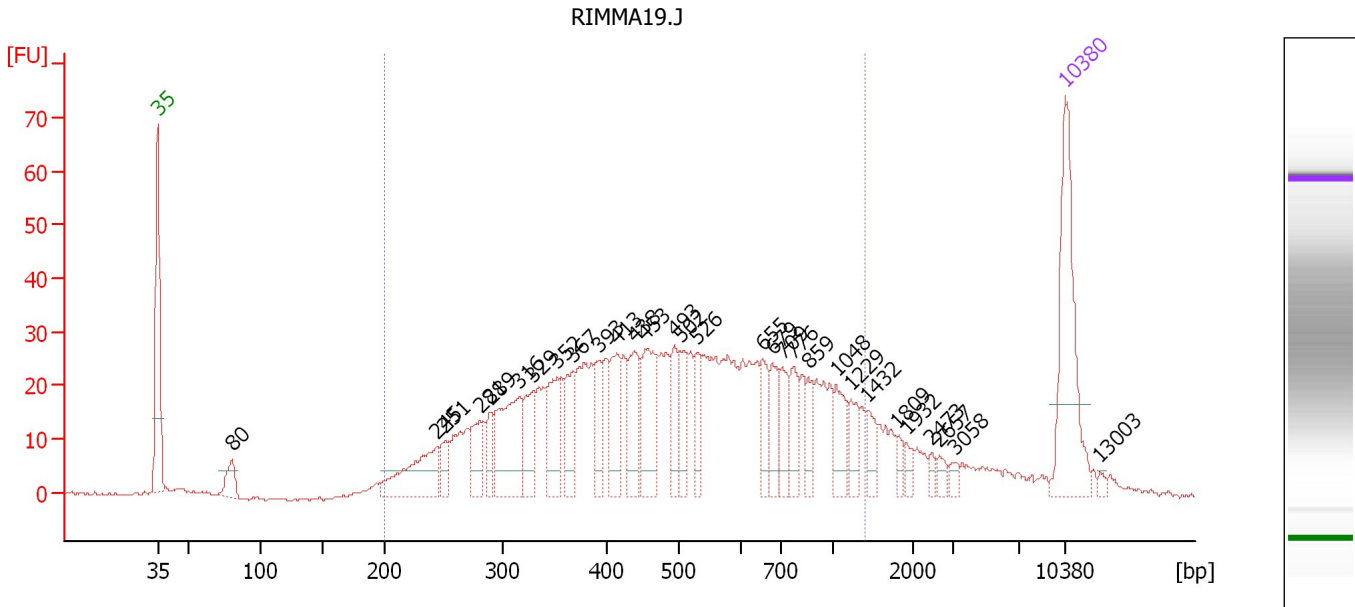
Region table for sample 6 : RIPE1.1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	687	344	49,146.4	10,091.76	4,738.5	96	27.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 7 : RIMMA19.J

Number of peaks found: 30 Corr. Area 1: 942.6
 Noise: 0.2

Peak table for sample 7 : RIMMA19.J

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	19.96	376.3	
3	245	63.28	391.5	
4	251	13.84	83.5	
5	281	30.51	164.7	
6	289	18.81	98.5	
7	316	75.12	360.7	
8	329	33.06	152.3	
9	352	42.42	182.7	
10	367	28.95	119.4	
11	393	26.51	102.3	
12	413	36.24	132.9	
13	438	39.71	137.4	
14	453	53.33	178.3	
15	493	26.25	80.7	
16	502	23.98	72.4	
17	526	22.65	65.2	
18	655	21.99	50.8	
19	679	24.37	54.4	
20	709	22.25	47.6	
21	776	23.81	46.5	
22	859	15.24	26.9	
23	1,048	23.81	34.4	
24	1,229	15.08	18.6	
25	1,432	13.23	14.0	
26	1,809	6.08	5.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad


Created: 8/22/2013 10:25:34 AM
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Electropherogram Summary Continued ...

... Peak table for sample 7 : RIMMA19.J

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	1,932	5.15	4.0	
28	2,473	4.16	2.5	
29	2,657	5.73	3.3	
30	3,058	4.60	2.3	
31	10,380	75.00	10.9	Upper Marker
32	13,003	0.00	0.0	

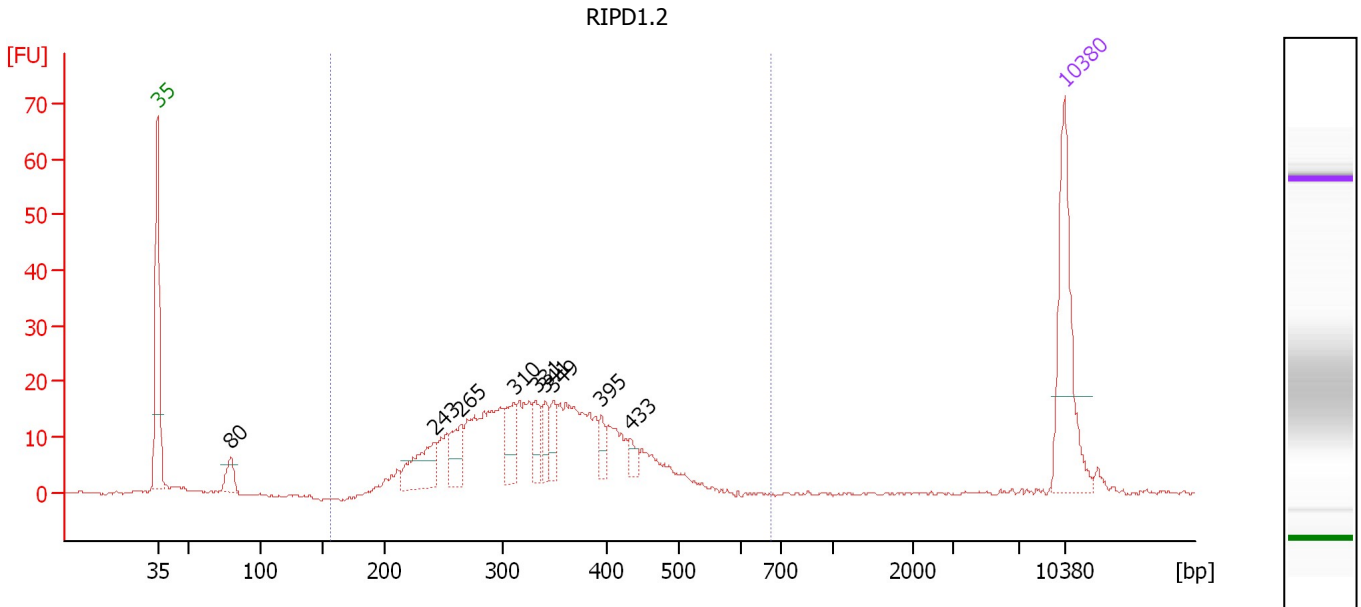
Region table for sample 7 : RIMMA19.J

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,419	537	4,230.0	1,172.15	942.6	87	45.9	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 8 : RIPD1.2

Number of peaks found: 9 Corr. Area 1: 374.7
 Noise: 0.3

Peak table for sample 8 : RIPD1.2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	20.02	380.7	
3	243	49.30	307.9	
4	265	30.87	176.7	
5	310	29.91	146.1	
6	331	21.66	99.0	
7	341	17.90	79.6	
8	349	17.73	77.1	
9	395	11.93	45.8	
10	433	8.44	29.6	
11	10,380	75.00	10.9	Upper Marker

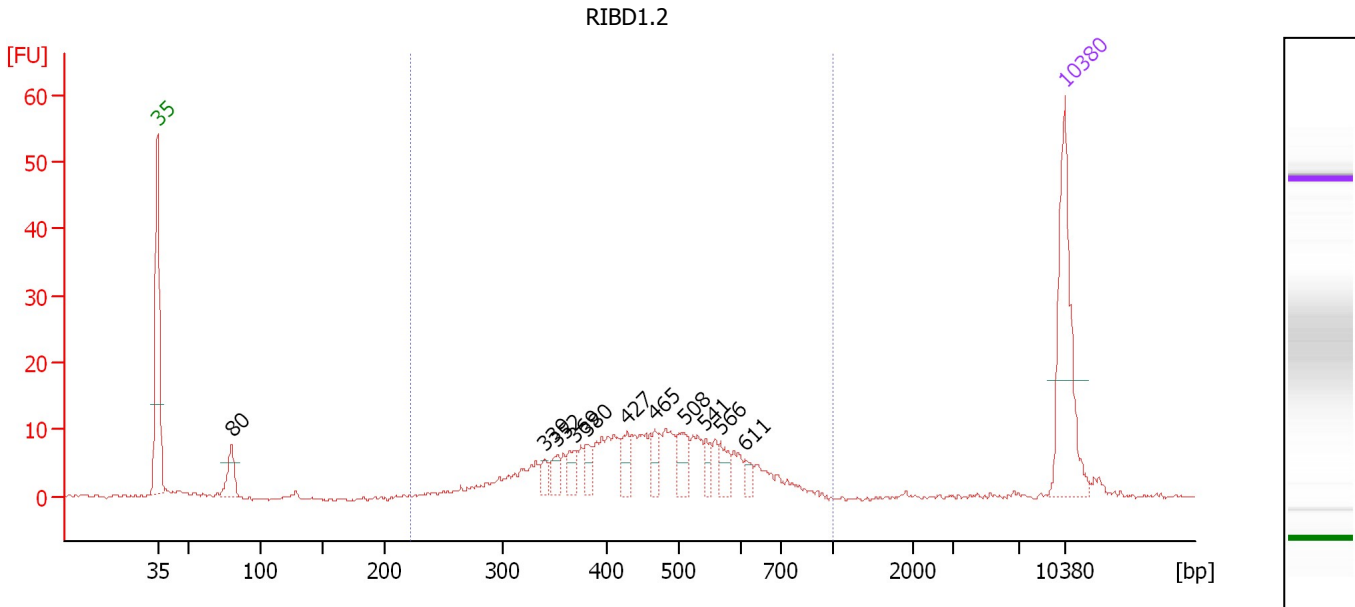
Region table for sample 8 : RIPD1.2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
156	678	338	2,907.0	606.80	374.7	93	21.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 9 : RIBD1.2

Number of peaks found: 11 Corr. Area 1: 204.7
 Noise: 0.3

Peak table for sample 9 : RIBD1.2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	26.96	510.3	
3	339	8.66	38.7	
4	352	11.44	49.3	
5	369	14.33	58.8	
6	380	11.73	46.8	
7	427	15.32	54.4	
8	465	12.63	41.1	
9	508	21.13	63.0	
10	541	10.04	28.1	
11	566	14.39	38.5	
12	611	6.40	15.9	
13	10,380	75.00	10.9	Upper Marker

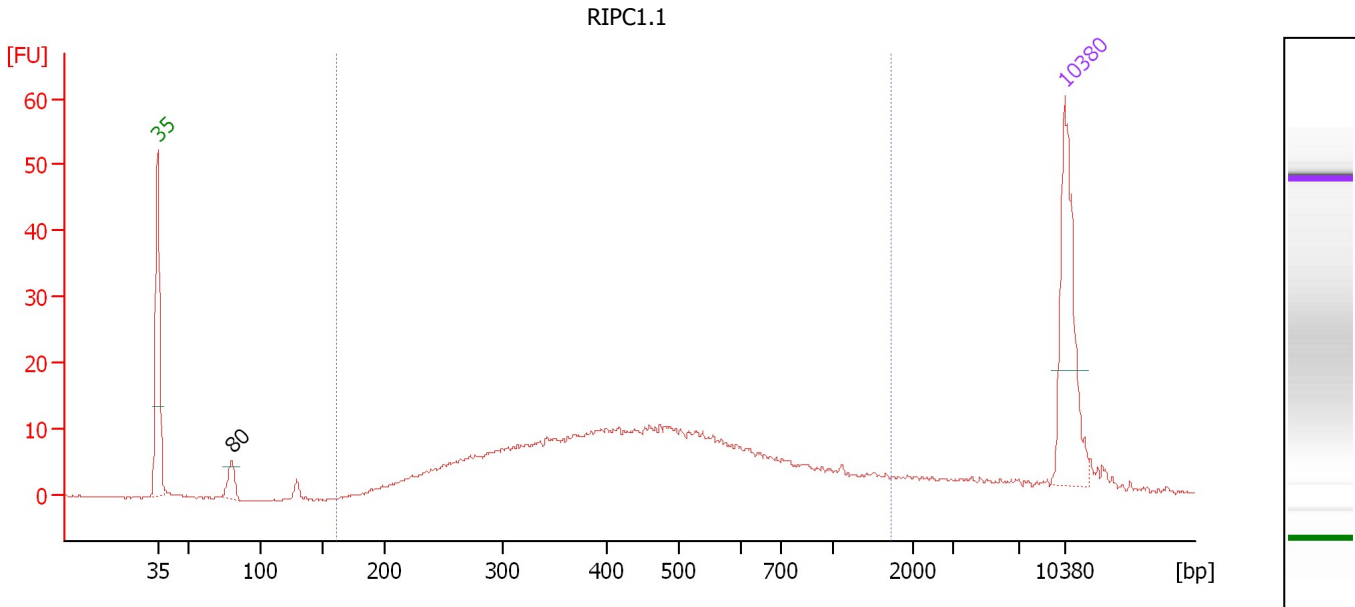
Region table for sample 9 : RIBD1.2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	1,000	463	1,351.5	379.59	204.7	89	24.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 10 : RIPC1.1

Number of peaks found: 1 Corr. Area 1: 329.1
 Noise: 0.2

Peak table for sample 10 : RIPC1.1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	18.77	355.9	
3	10,380	75.00	10.9	Upper Marker

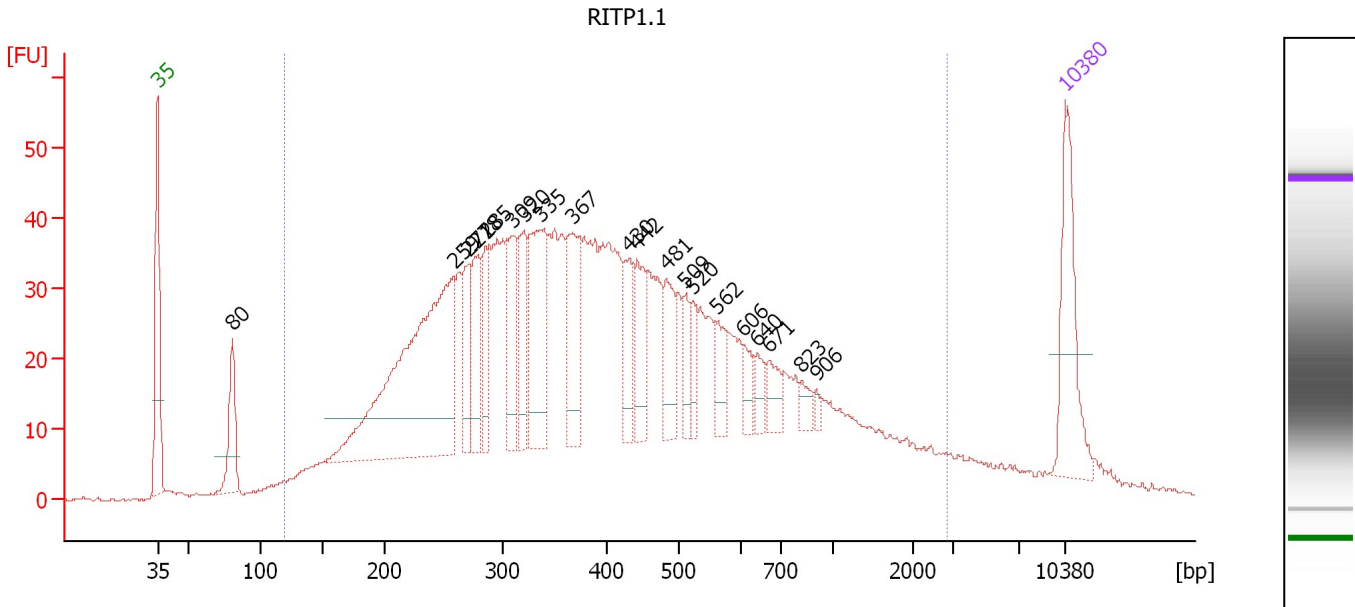
Region table for sample 10 : RIPC1.1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
162	1,734	499	2,214.8	567.04	329.1	88	52.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

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Electropherogram Summary Continued ...



Overall Results for sample 11 : RITP1.1

Number of peaks found: 20 Corr. Area 1: 1,496.0
 Noise: 0.3

Peak table for sample 11 : RITP1.1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	68.07	1,283.6	
3	259	398.47	2,333.4	
4	271	57.40	321.1	
5	278	66.60	362.9	
6	285	52.07	276.6	
7	309	67.78	332.7	
8	320	58.77	278.4	
9	335	125.29	565.9	
10	367	92.99	384.3	
11	430	48.52	171.1	
12	442	54.12	185.7	
13	481	46.06	145.0	
14	509	25.30	75.3	
15	520	23.72	69.1	
16	562	28.19	76.1	
17	606	19.47	48.7	
18	640	17.45	41.3	
19	671	22.72	51.3	
20	823	11.58	21.3	
21	906	5.04	8.4	
22	10,380	75.00	10.9	Upper Marker

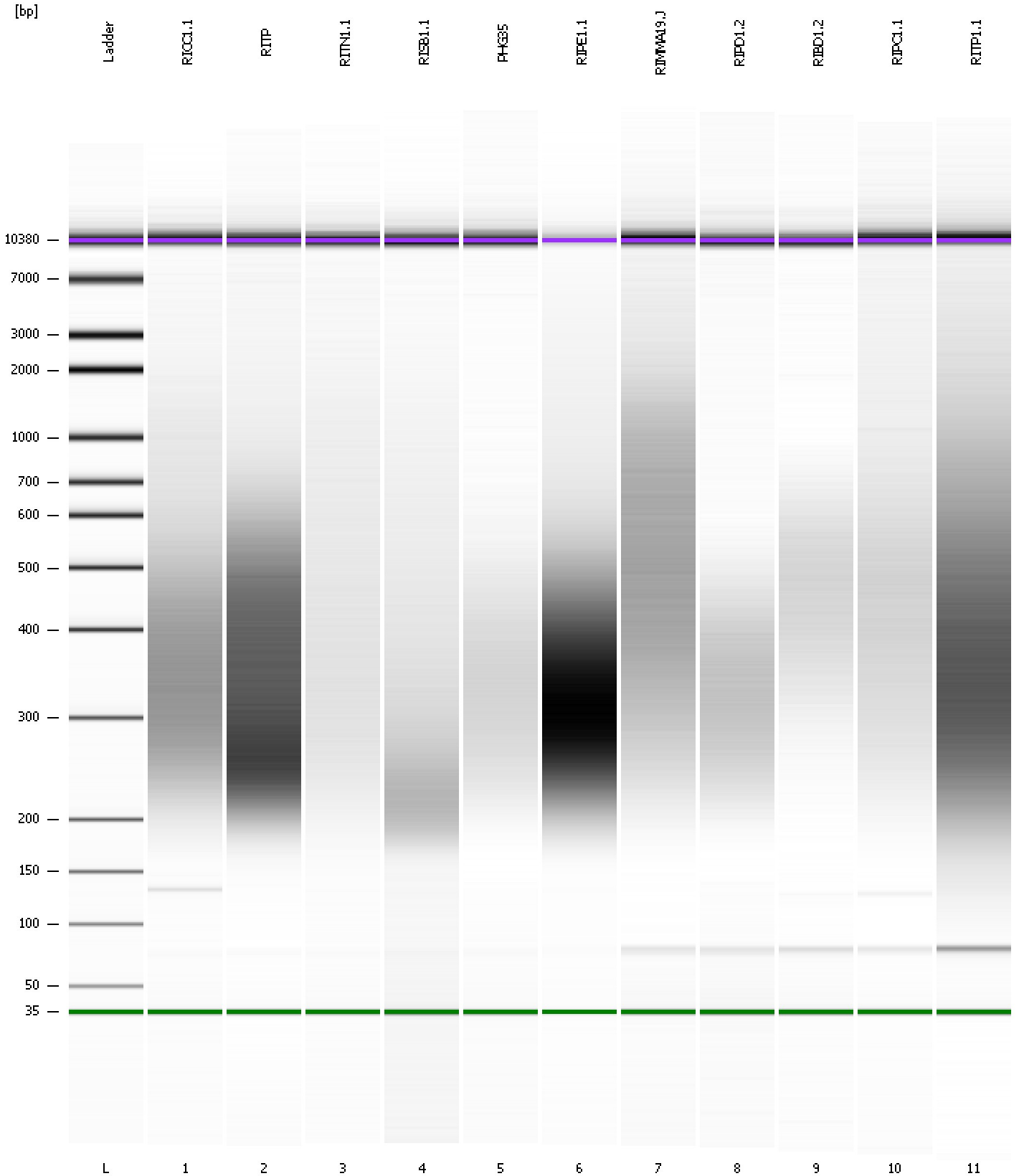
Region table for sample 11 : RITP1.1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
119	2,861	491	13,400.1	2,900.06	1,496.0	95	77.7	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
Modified: 8/22/2013 11:07:37 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad

Created: 8/22/2013 10:25:34 AM
 Modified: 8/22/2013 11:07:37 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		8/22/2013 11:06:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-22\2013-08-22_002.xad)		Instrument	Run		8/22/2013 10:25:40 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/22/2013 10:25:40 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/22/2013 10:25:40 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/22/2013 10:25:40 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/22/2013 10:25:40 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/22/2013 10:25:40 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/22/2013 10:25:40 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1