

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ngs\Bioanalyzer\2015-11-11\2015-11-11_001_Pistachio_1-6.xad

Created: 11/11/2015 8:03:27 AM
Modified: 11/11/2015 10:34:13 AM

Electrophoresis File Run Summary

Instrument Information:

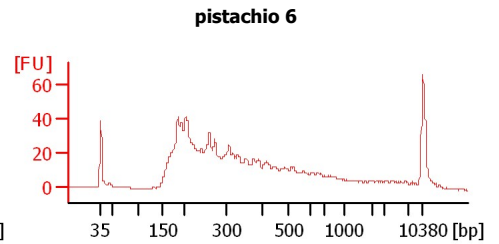
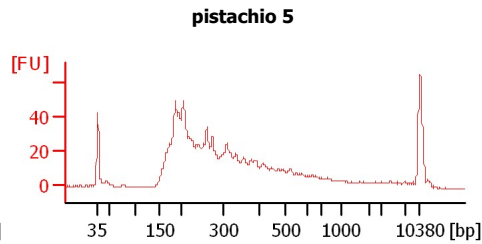
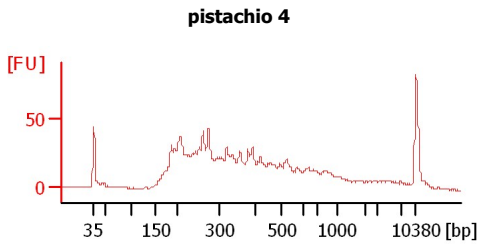
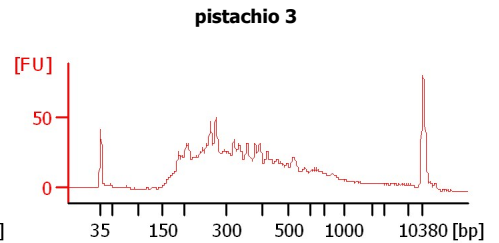
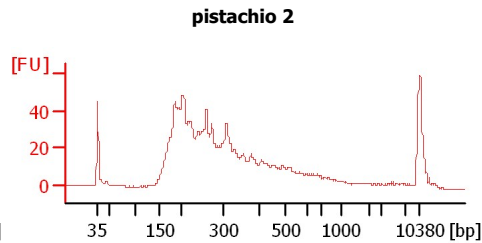
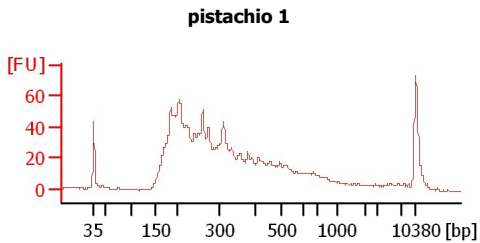
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



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 Data Path: C:\...ngs\Bioanalyzer\2015-11-11\2015-11-11_001_Pistachio_1-6.xad

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Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
pistachio 1		<input type="checkbox"/>	✓			
pistachio 2		<input type="checkbox"/>	✓			
pistachio 3		<input type="checkbox"/>	✓			
pistachio 4		<input type="checkbox"/>	✓			
pistachio 5		<input type="checkbox"/>	✓			
pistachio 6		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

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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

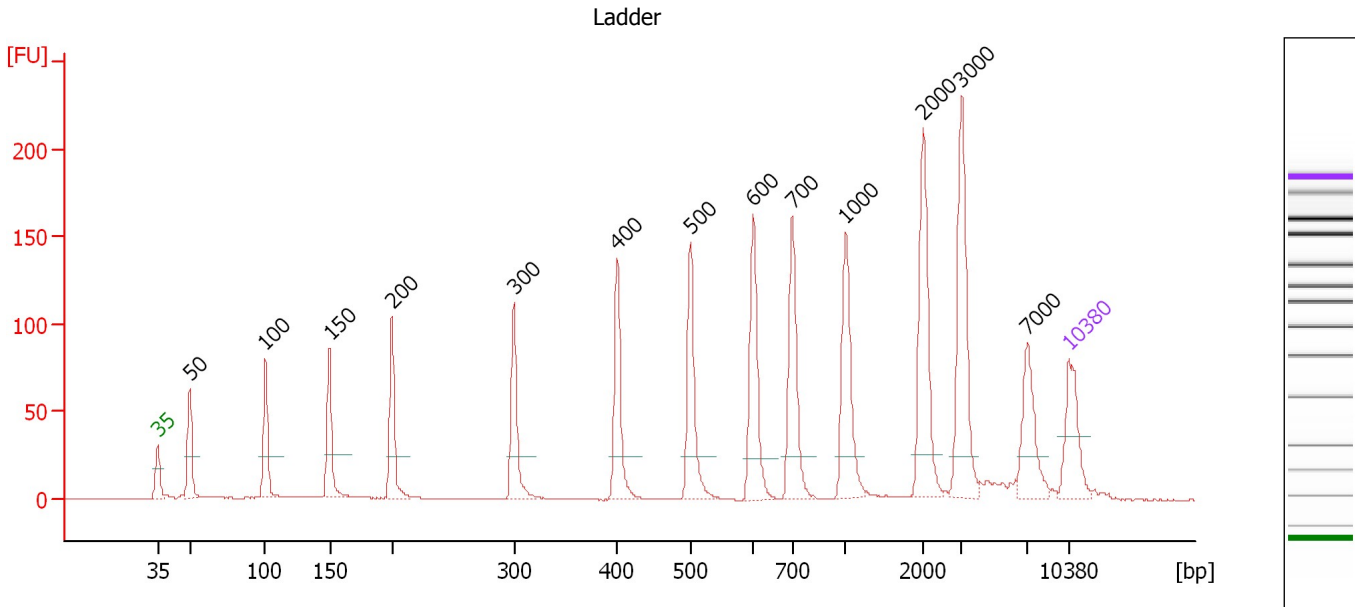
Ladder

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

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Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

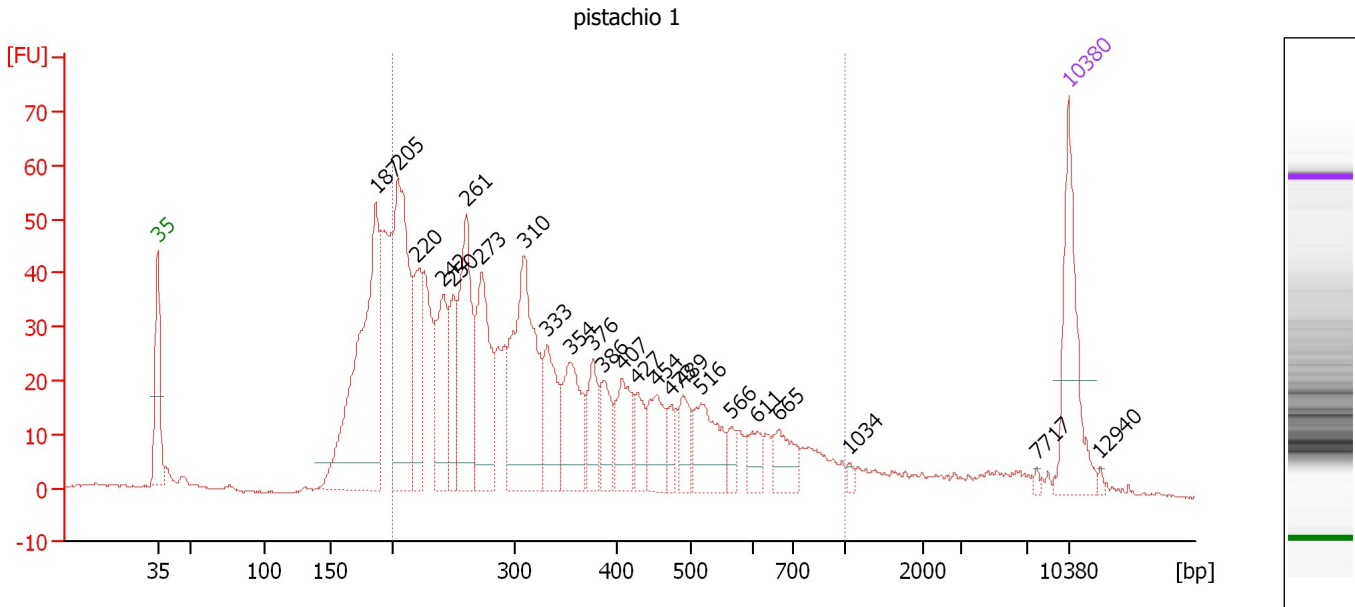
Peak table for Ladder

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	45.47
3	100	150.00	2,272.7	Ladder Peak	51.28
4	150	150.00	1,515.2	Ladder Peak	56.22
5	200	150.00	1,136.4	Ladder Peak	61.01
6	300	150.00	757.6	Ladder Peak	70.37
7	400	150.00	568.2	Ladder Peak	78.33
8	500	150.00	454.5	Ladder Peak	83.96
9	600	150.00	378.8	Ladder Peak	88.75
10	700	150.00	324.7	Ladder Peak	91.78
11	1,000	150.00	227.3	Ladder Peak	95.87
12	2,000	150.00	113.6	Ladder Peak	101.83
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.84
15	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...



Overall Results for sample 5 : pistachio 1

Number of peaks found: 24 Corr. Area 1: 1,091.0
 Noise: 0.2

Peak table for sample 5 : pistachio 1

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	187	308.20	2,495.0		59.78
3	205	224.72	1,662.7		61.46
4	220	82.38	568.3		62.85
5	242	91.18	570.4		64.96
6	250	61.55	372.5		65.73
7	261	139.19	809.1		66.68
8	273	124.39	689.2		67.88
9	310	198.45	968.8		71.19
10	333	67.27	306.4		72.97
11	354	74.24	317.4		74.69
12	376	41.41	166.8		76.42
13	386	36.15	141.8		77.23
14	407	50.85	189.3		78.72
15	427	28.05	99.6		79.82
16	454	46.56	155.4		81.36
17	473	16.97	54.3		82.46
18	489	30.00	93.0		83.32
19	516	59.70	175.4		84.71
20	566	12.95	34.7		87.11
21	611	20.72	51.4		89.08
22	665	29.82	68.0		90.71
23	1,034	3.94	5.8		96.08
24	7,717	2.32	0.5		110.51
25	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...

... Peak table for sample 5 : pistachio 1

Peak	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	12,940	0.00	0.0		115.40

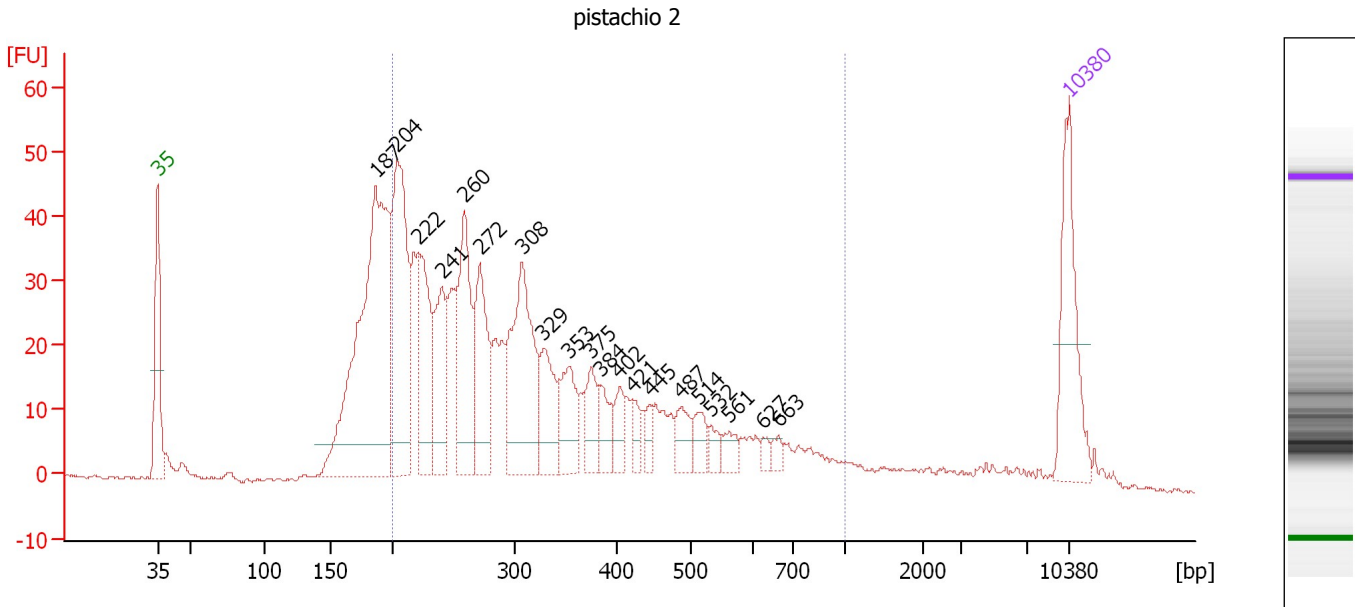
Region table for sample 5 : pistachio 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ μ l]	% of Total	Size distribution in CV [%]
200	1,000	361	1,091.0	8,610.7	1,703.99	76	42.6

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Electropherogram Summary Continued ...



Overall Results for sample 6 : pistachio 2

Number of peaks found: 20 Corr. Area 1: 852.7
 Noise: 0.3

Peak table for sample 6 : pistachio 2

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	187	417.62	3,385.9		59.75
3	204	211.85	1,573.1		61.39
4	222	112.43	768.9		63.03
5	241	82.69	519.7		64.86
6	260	129.38	755.0		66.59
7	272	99.61	554.9		67.75
8	308	159.01	781.7		71.02
9	329	60.16	277.3		72.66
10	353	53.89	231.3		74.58
11	375	35.19	142.3		76.31
12	384	25.96	102.5		77.04
13	402	21.66	81.7		78.43
14	421	14.71	53.0		79.49
15	445	12.74	43.4		80.84
16	487	24.02	74.7		83.25
17	514	18.65	54.9		84.64
18	532	11.86	33.7		85.51
19	561	12.99	35.1		86.86
20	627	6.27	15.2		89.55
21	663	7.82	17.9		90.66
22	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...

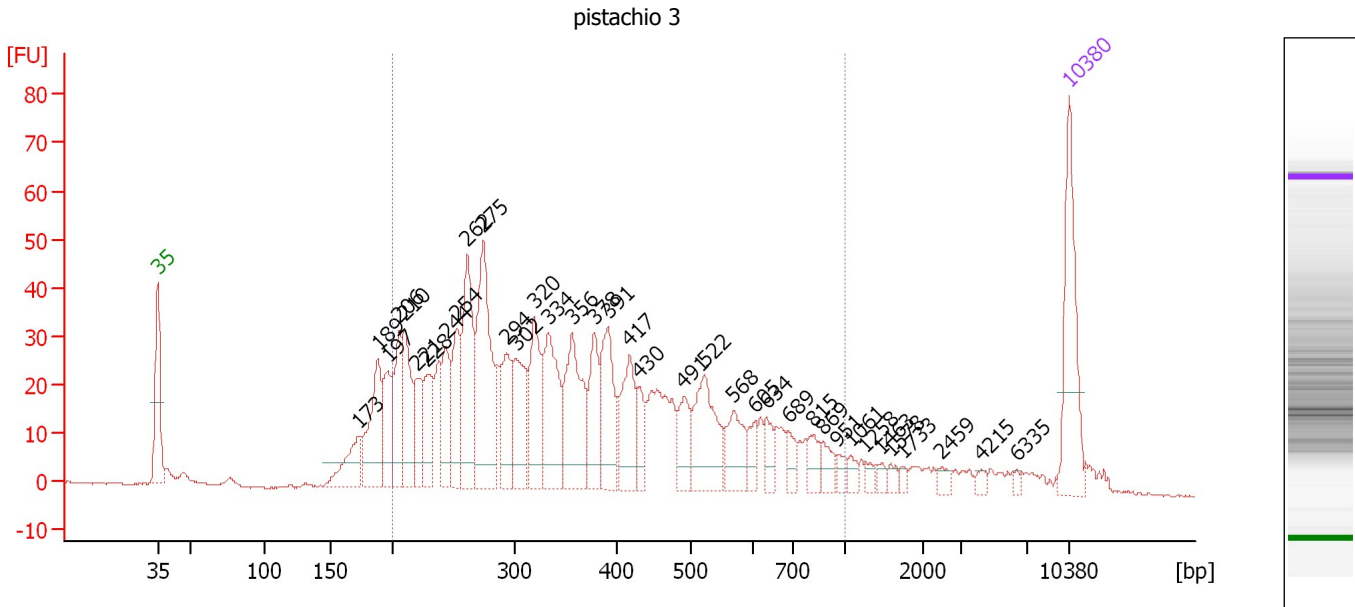
... Region table for sample 6 : pistachio 2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	351	852.7	7,803.3	1,511.22	74	42.8

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Electropherogram Summary Continued ...



Overall Results for sample 7 : pistachio 3

Number of peaks found: 37 Corr. Area 1: 1,034.6
 Noise: 0.2

Peak table for sample 7 : pistachio 3

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	173	49.56	433.4		58.45
3	189	92.55	743.7		59.91
4	197	50.41	388.3		60.70
5	206	63.44	466.5		61.58
6	210	73.62	530.6		61.97
7	221	42.32	290.6		62.94
8	228	52.32	346.9		63.68
9	244	56.53	350.8		65.14
10	254	61.07	364.9		66.02
11	262	111.94	647.5		66.81
12	275	154.67	852.2		68.03
13	294	61.70	317.6		69.84
14	302	70.83	355.4		70.52
15	320	76.14	360.8		71.94
16	334	96.90	439.8		73.06
17	356	105.26	448.0		74.82
18	378	52.26	209.4		76.58
19	391	72.48	280.9		77.61
20	417	63.30	230.1		79.27
21	430	26.05	91.8		80.00
22	491	33.77	104.3		83.43
23	522	75.90	220.5		84.99
24	568	38.14	101.6		87.24
25	605	15.68	39.3		88.90

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Electropherogram Summary Continued ...

... Peak table for sample 7 : pistachio 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	634	17.45	41.7		89.78
27	689	15.98	35.1		91.44
28	815	15.42	28.7		93.35
29	869	14.58	25.4		94.08
30	951	8.53	13.6		95.21
31	1,061	7.61	10.9		96.23
32	1,258	5.28	6.4		97.41
33	1,463	5.92	6.1		98.63
34	1,578	5.73	5.5		99.31
35	1,733	4.01	3.5		100.24
36	2,459	5.74	3.5		103.17
37	4,215	4.62	1.7		106.30
38	6,335	3.28	0.8		108.99
39	10,380	75.00	10.9	Upper Marker	113.00

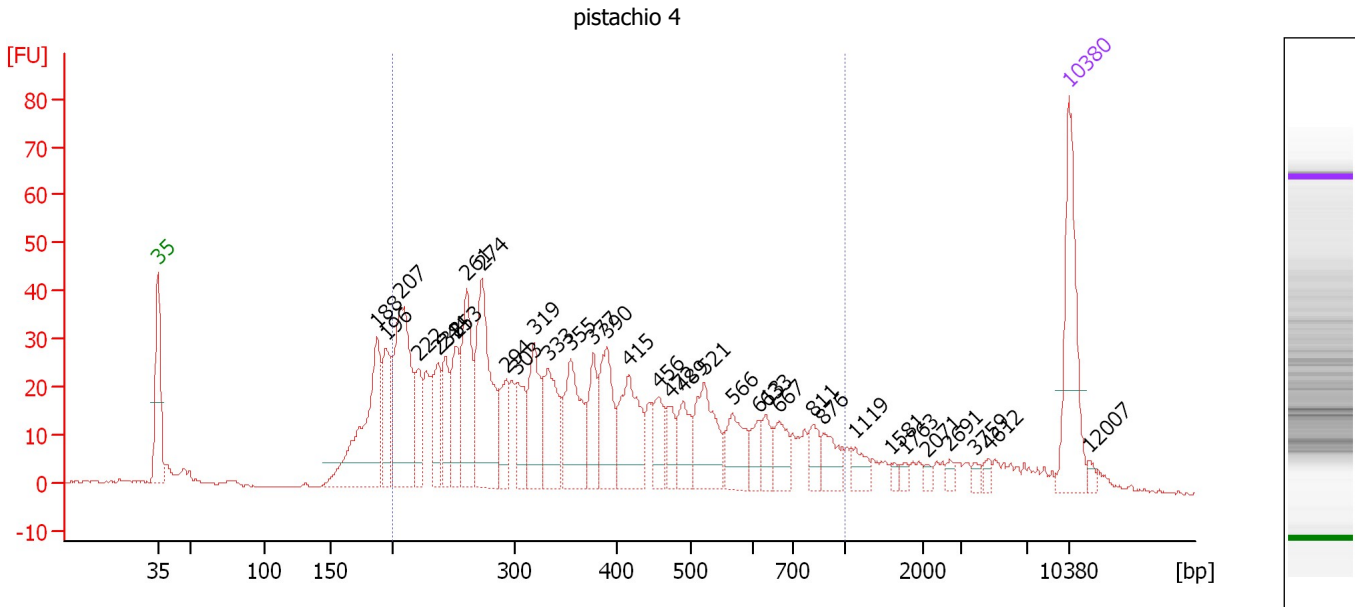
Region table for sample 7 : pistachio 3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	390	1,034.6	7,947.3	1,694.72	84	41.0

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Electropherogram Summary Continued ...



Overall Results for sample 8 : pistachio 4

Number of peaks found: 35 Corr. Area 1: 969.6
 Noise: 0.2

Peak table for sample 8 : pistachio 4

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	188	151.89	1,224.1		59.86
3	196	57.67	446.5		60.60
4	207	155.14	1,134.8		61.68
5	222	42.86	292.7		63.06
6	238	45.71	291.5		64.53
7	244	43.64	271.1		65.12
8	253	53.11	318.2		65.96
9	261	88.21	511.6		66.74
10	274	136.71	756.3		67.92
11	294	40.00	206.3		69.79
12	303	40.88	204.3		70.63
13	319	70.48	334.4		71.90
14	333	63.54	289.2		72.99
15	355	78.52	335.0		74.76
16	377	42.05	169.1		76.48
17	390	62.83	244.3		77.51
18	415	76.20	278.1		79.18
19	456	28.75	95.5		81.49
20	472	18.47	59.3		82.38
21	489	34.59	107.1		83.36
22	521	63.05	183.2		84.98
23	566	39.53	105.7		87.14
24	613	16.71	41.3		89.16
25	633	17.83	42.7		89.75

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Electropherogram Summary Continued ...

... Peak table for sample 8 : pistachio 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	667	25.91	58.8		90.78
27	811	17.52	32.7		93.29
28	876	21.99	38.1		94.17
29	1,119	13.98	18.9		96.58
30	1,581	4.09	3.9		99.33
31	1,763	4.32	3.7		100.42
32	2,071	3.98	2.9		102.04
33	2,691	4.43	2.5		103.86
34	3,759	4.14	1.7		105.72
35	4,612	4.76	1.6		106.81
36	10,380	75.00	10.9	Upper Marker	113.00
37	12,007	0.00	0.0		114.52

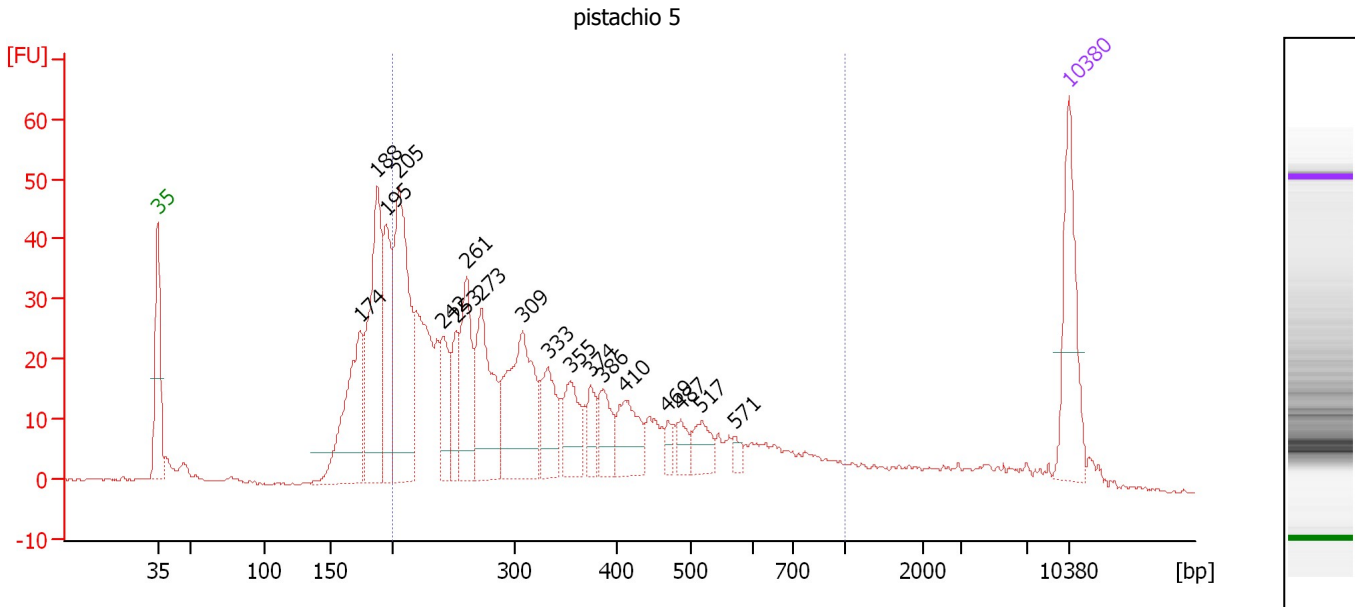
Region table for sample 8 : pistachio 4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	399	969.5	7,097.4	1,507.52	78	43.3

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Electropherogram Summary Continued ...



Overall Results for sample 9 : pistachio 5

Number of peaks found: 18 Corr. Area 1: 761.7
 Noise: 0.2

Peak table for sample 9 : pistachio 5

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	174	153.43	1,333.1		58.56
3	188	200.01	1,609.8		59.88
4	195	109.07	847.8		60.52
5	205	217.00	1,601.4		61.51
6	242	57.02	357.6		64.91
7	253	49.72	298.1		65.94
8	261	95.97	556.9		66.73
9	273	119.69	663.8		67.86
10	309	155.95	765.5		71.06
11	333	58.82	267.8		72.98
12	355	51.80	221.0		74.75
13	374	26.64	108.0		76.23
14	386	37.79	148.3		77.21
15	410	52.03	192.3		78.89
16	469	11.17	36.1		82.18
17	487	17.04	53.0		83.22
18	517	27.07	79.3		84.79
19	571	7.89	20.9		87.35
20	10,380	75.00	10.9	Upper Marker	113.00

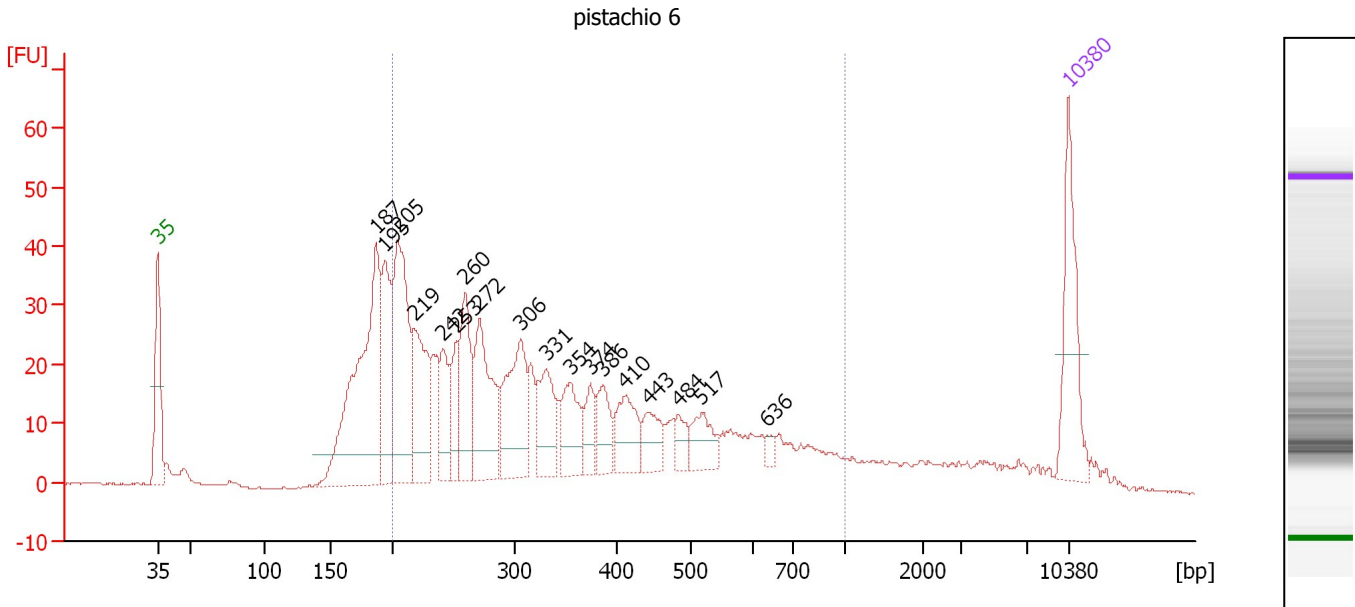
Region table for sample 9 : pistachio 5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	359	761.7	7,357.0	1,441.68	71	43.5

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Electropherogram Summary Continued ...



Overall Results for sample 10 : pistachio 6

Number of peaks found: 18 Corr. Area 1: 759.7
 Noise: 0.1

Peak table for sample 10 : pistachio 6

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	187	307.94	2,490.6		59.80
3	195	104.18	811.4		60.49
4	205	190.32	1,407.1		61.47
5	219	108.46	751.7		62.75
6	242	57.36	359.4		64.92
7	253	47.94	287.3		65.96
8	260	88.36	514.5		66.65
9	272	120.17	669.9		67.73
10	306	112.72	557.3		70.88
11	331	66.19	302.8		72.85
12	354	58.14	248.8		74.67
13	374	31.44	127.4		76.25
14	386	36.87	144.6		77.24
15	410	51.47	190.0		78.91
16	443	34.25	117.2		80.73
17	484	18.38	57.6		83.05
18	517	34.61	101.4		84.77
19	636	6.77	16.1		89.85
20	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 10 : pistachio 6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	375	759.7	7,223.6	1,459.03	72	43.8

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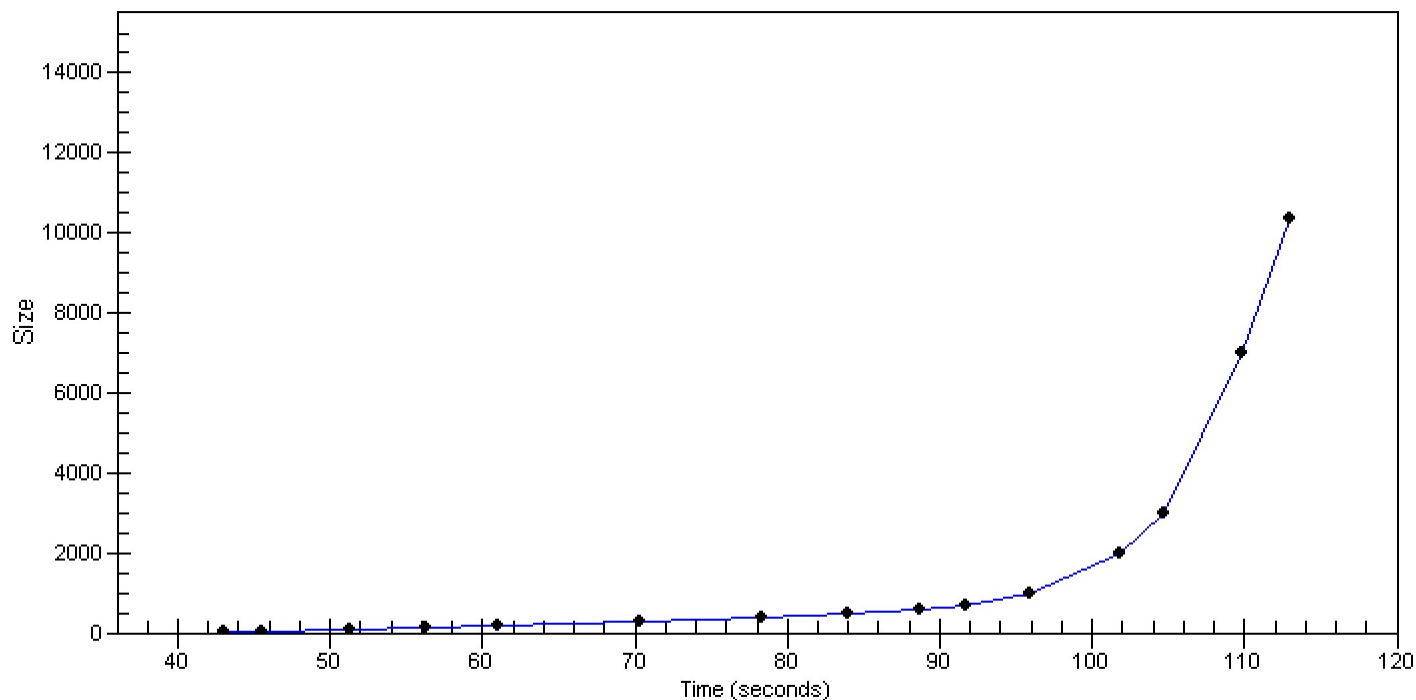
Gel Image

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ngs\Bioanalyzer\2015-11-11\2015-11-11_001_Pistachio_1-6.xad

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Curves

Standard Curve



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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		11/11/2015 8:44:45 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-11-11\2015-11-11_001.xad)		Instrument	Run		11/11/2015 8:03:32 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/11/2015 8:03:32 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/11/2015 8:03:32 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/11/2015 8:03:32 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/11/2015 8:03:32 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/11/2015 8:03:32 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/11/2015 8:03:32 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1