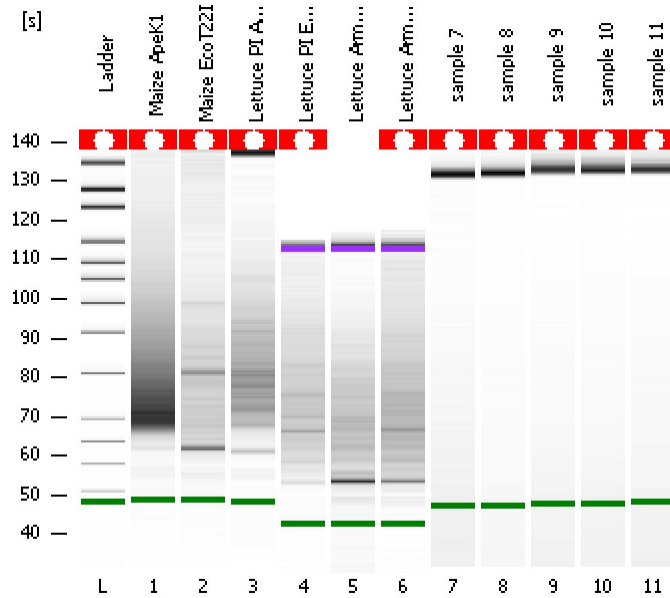


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 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

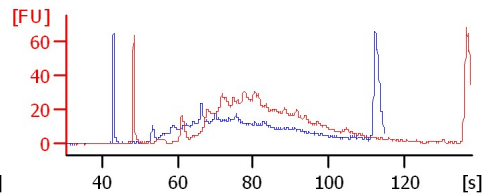
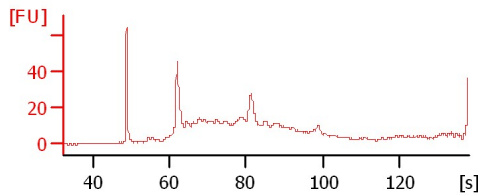
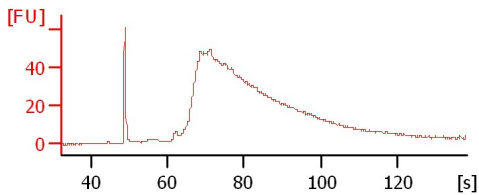
Chip Information:

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

**Maize ApeK1**

**Maize EcoT22I**

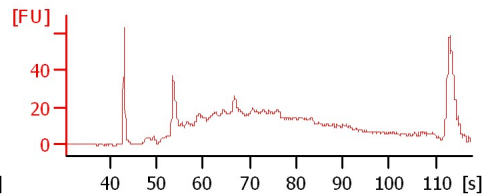
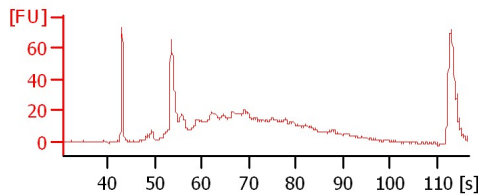
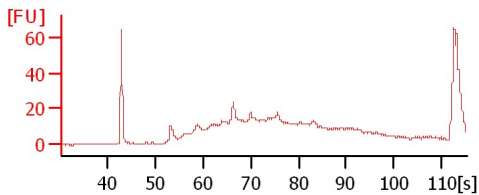
**Lettuce PI ApeK1**



**Lettuce PI EcoT22I**

**Lettuce Arm ApeK1**

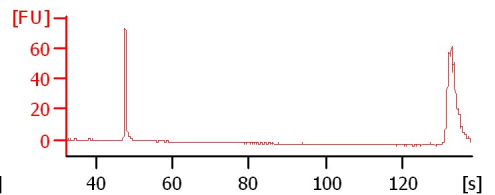
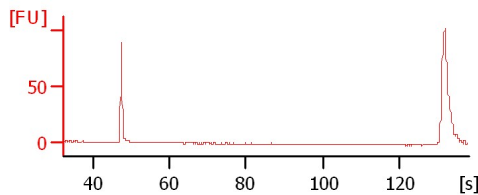
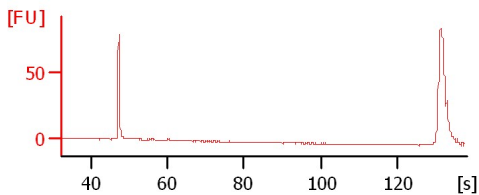
**Lettuce Arm EcoT22I**



**sample 7**

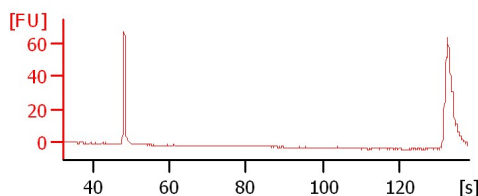
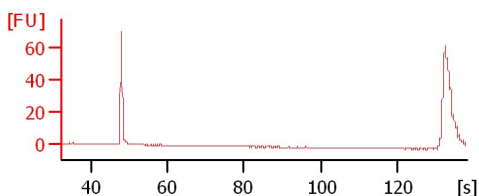
**sample 8**

**sample 9**



**sample 10**

**sample 11**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Maize ApeK1		<input type="checkbox"/>	✓			
Maize EcoT22I		<input type="checkbox"/>	✓			
Lettuce PI ApeK1		<input type="checkbox"/>	✓			
Lettuce PI EcoT22I		<input type="checkbox"/>	✓			
Lettuce Arm ApeK1		<input type="checkbox"/>	✓			
Lettuce Arm EcoT22I		<input type="checkbox"/>	✓			
sample 7		<input type="checkbox"/>	✓			
sample 8		<input type="checkbox"/>	✓			
sample 9		<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:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 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

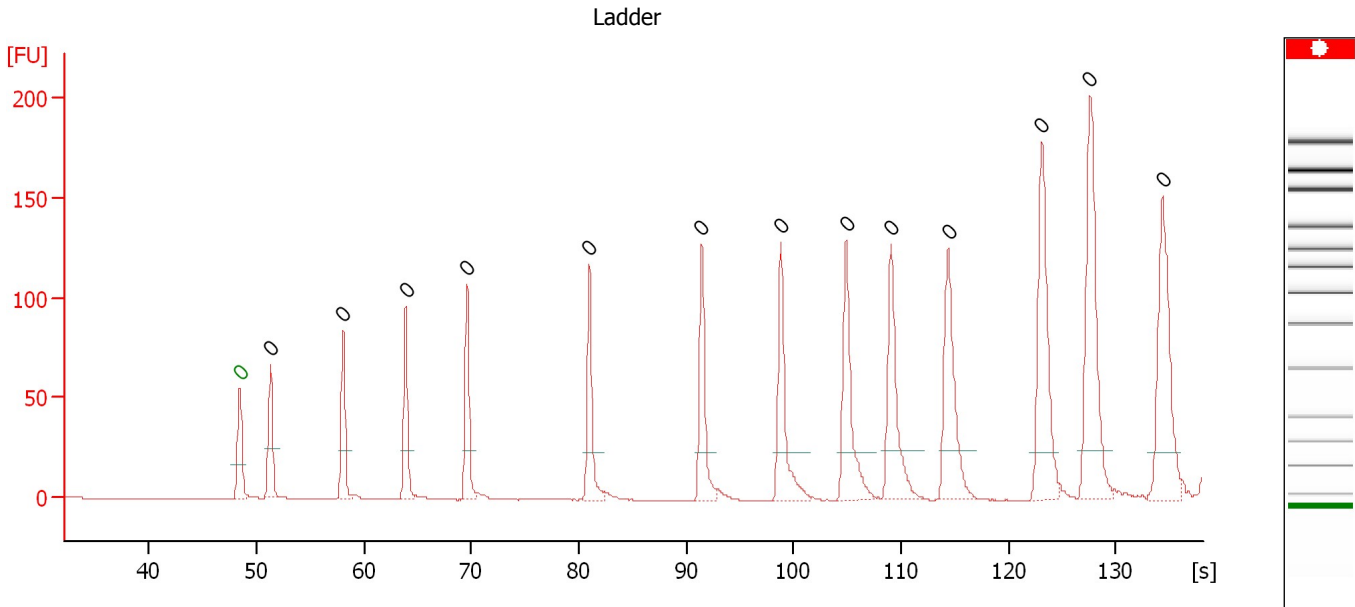
**Ladder**

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\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

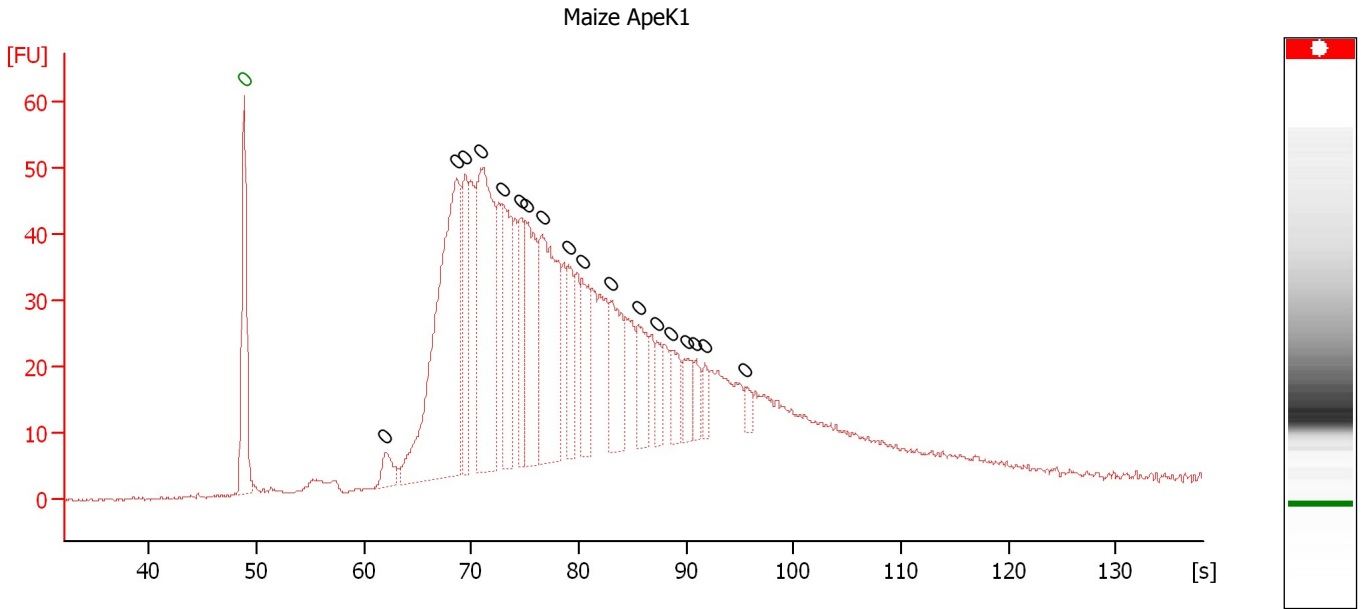
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	48.45
2	0	0.00	0.0	Ladder Peak	51.30
3	0	0.00	0.0	Ladder Peak	58.05
4	0	0.00	0.0	Ladder Peak	63.90
5	0	0.00	0.0	Ladder Peak	69.60
6	0	0.00	0.0	Ladder Peak	81.00
7	0	0.00	0.0	Ladder Peak	91.45
8	0	0.00	0.0	Ladder Peak	98.80
9	0	0.00	0.0	Ladder Peak	104.90
10	0	0.00	0.0	Ladder Peak	109.10
11	0	0.00	0.0	Ladder Peak	114.40
12	0	0.00	0.0	Ladder Peak	123.10
13	0	0.00	0.0	Ladder Peak	127.60
14	0	0.00	0.0	Ladder Peak	134.35

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Maize ApeK1**

Number of peaks found: 18                      Noise: 0.2

**Peak table for sample 1 : Maize ApeK1**

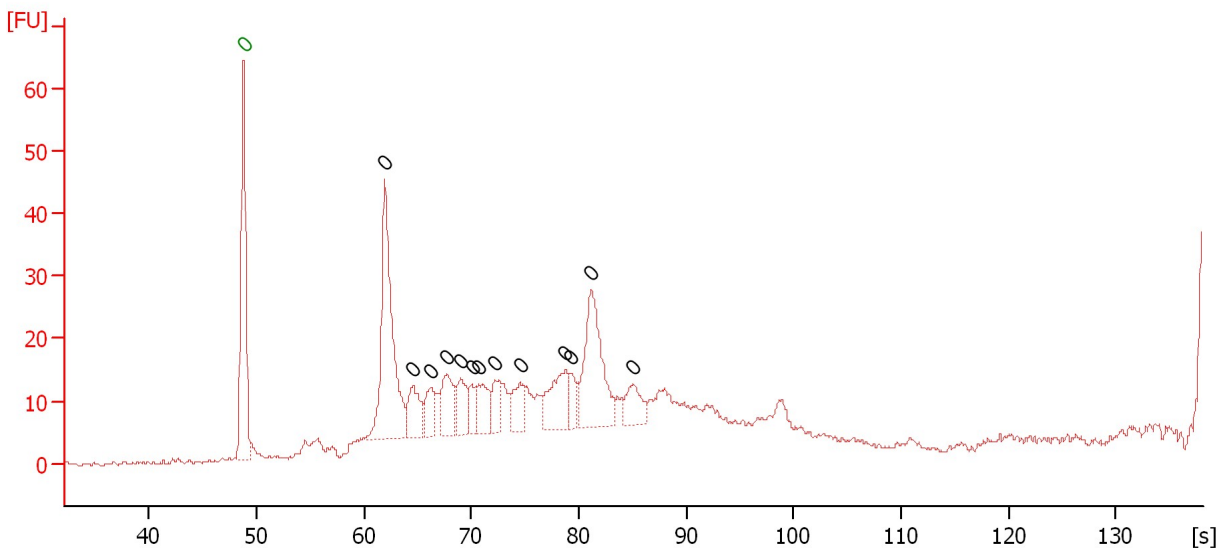
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	48.85
2	0	0.00	0.0		62.00
3	0	0.00	0.0		68.65
4	0	0.00	0.0		69.45
5	0	0.00	0.0		70.90
6	0	0.00	0.0		72.90
7	0	0.00	0.0		74.65
8	0	0.00	0.0		75.10
9	0	0.00	0.0		76.60
10	0	0.00	0.0		79.05
11	0	0.00	0.0		80.30
12	0	0.00	0.0		82.95
13	0	0.00	0.0		85.50
14	0	0.00	0.0		87.25
15	0	0.00	0.0		88.55
16	0	0.00	0.0		90.10
17	0	0.00	0.0		90.85
18	0	0.00	0.0		91.75
19	0	0.00	0.0		95.55

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

Maize EcoT22I



**Overall Results for sample 2 : Maize EcoT22I**

Number of peaks found: 13                      Noise: 0.4

**Peak table for sample 2 : Maize EcoT22I**

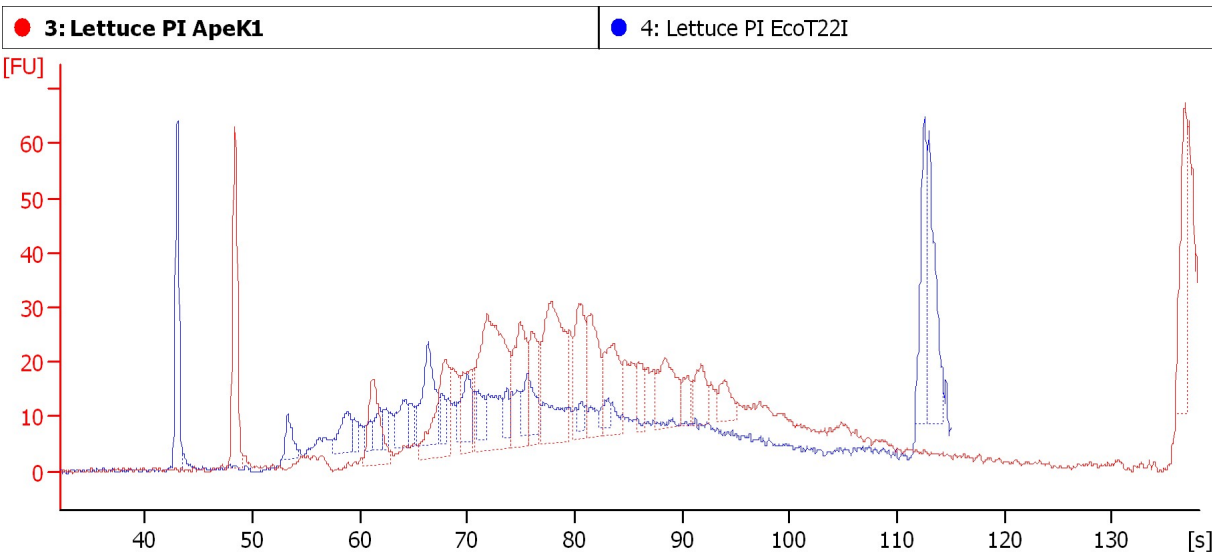
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	48.80
2	0	0.00	0.0		61.95
3	0	0.00	0.0		64.50
4	0	0.00	0.0		66.25
5	0	0.00	0.0		67.70
6	0	0.00	0.0		69.00
7	0	0.00	0.0		70.05
8	0	0.00	0.0		70.65
9	0	0.00	0.0		72.20
10	0	0.00	0.0		74.50
11	0	0.00	0.0		78.75
12	0	0.00	0.0		79.30
13	0	0.00	0.0		81.20
14	0	0.00	0.0		85.10

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

Lettuce PI ApeK1



**Overall Results for sample 3 : Lettuce PI ApeK1**

Number of peaks found: 16                      Noise: 0.6

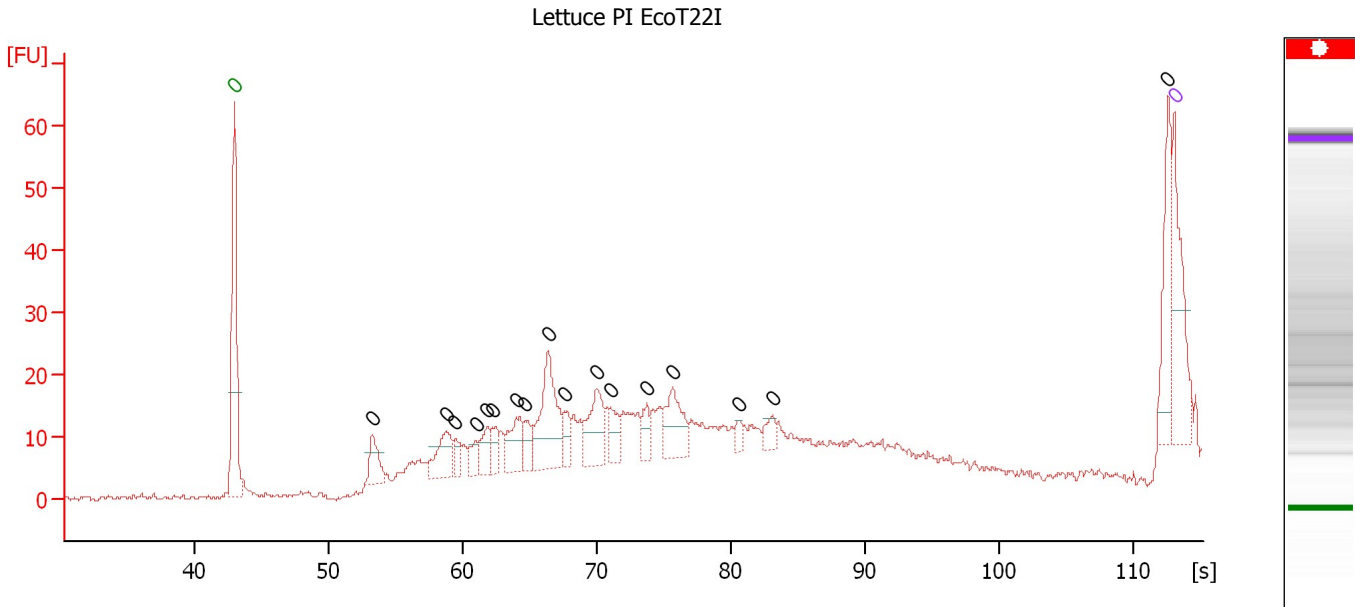
**Peak table for sample 3 : Lettuce PI ApeK1**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	48.35
2	0	0.00	0.0		61.15
3	0	0.00	0.0		67.90
4	0	0.00	0.0		70.40
5	0	0.00	0.0		71.80
6	0	0.00	0.0		74.90
7	0	0.00	0.0		75.95
8	0	0.00	0.0		77.80
9	0	0.00	0.0		80.35
10	0	0.00	0.0		81.45
11	0	0.00	0.0		83.60
12	0	0.00	0.0		85.95
13	0	0.00	0.0		88.35
14	0	0.00	0.0		90.50
15	0	0.00	0.0		91.75
16	0	0.00	0.0		93.95
17	0	0.00	0.0		136.75

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Lettuce PI EcoT22I**

Number of peaks found: 17                      Noise: 0.4

**Peak table for sample 4 : Lettuce PI EcoT22I**

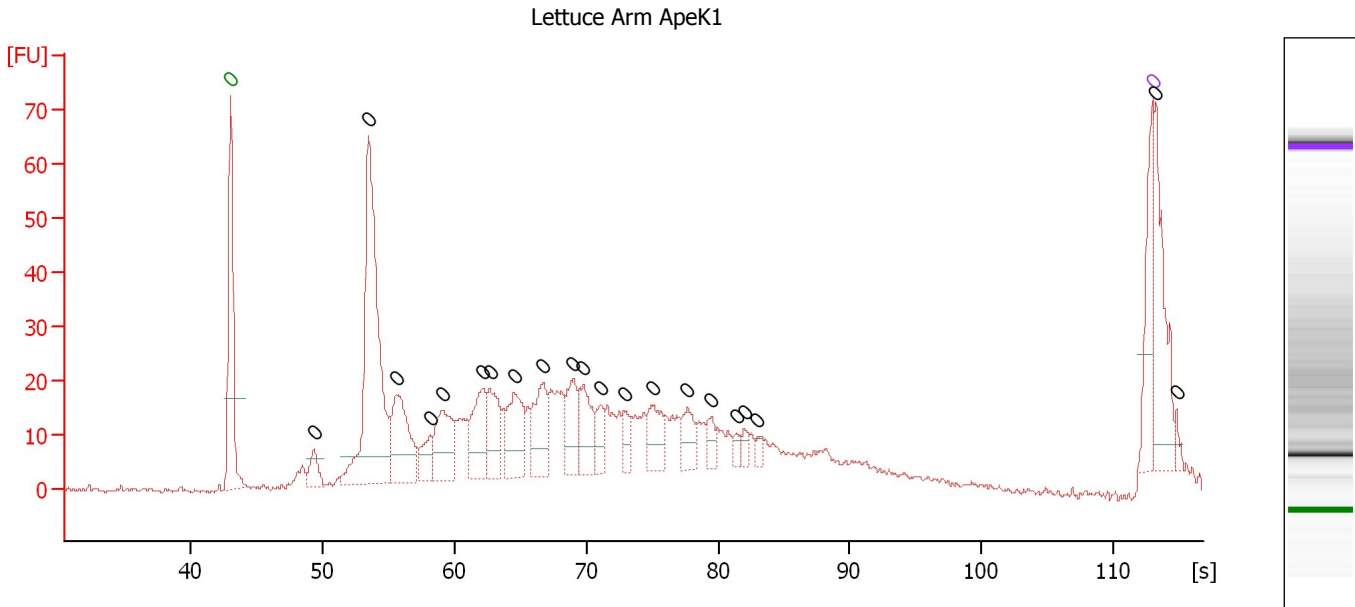
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.00
2	0	0.00	0.0		53.28
3	0	0.00	0.0		58.76
4	0	0.00	0.0		59.44
5	0	0.00	0.0		60.96
6	0	0.00	0.0		61.84
7	0	0.00	0.0		62.20
8	0	0.00	0.0		64.00
9	0	0.00	0.0		64.68
10	0	0.00	0.0		66.36
11	0	0.00	0.0		67.56
12	0	0.00	0.0		70.00
13	0	0.00	0.0		71.00
14	0	0.00	0.0		73.68
15	0	0.00	0.0		75.60
16	0	0.00	0.0		80.56
17	0	0.00	0.0		83.08
18	0	0.00	0.0		112.52
19	0	0.00	0.0	Upper Marker	113.00



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Lettuce Arm ApeK1**

Number of peaks found: 21                      Noise: 0.4

**Peak table for sample 5 : Lettuce Arm ApeK1**

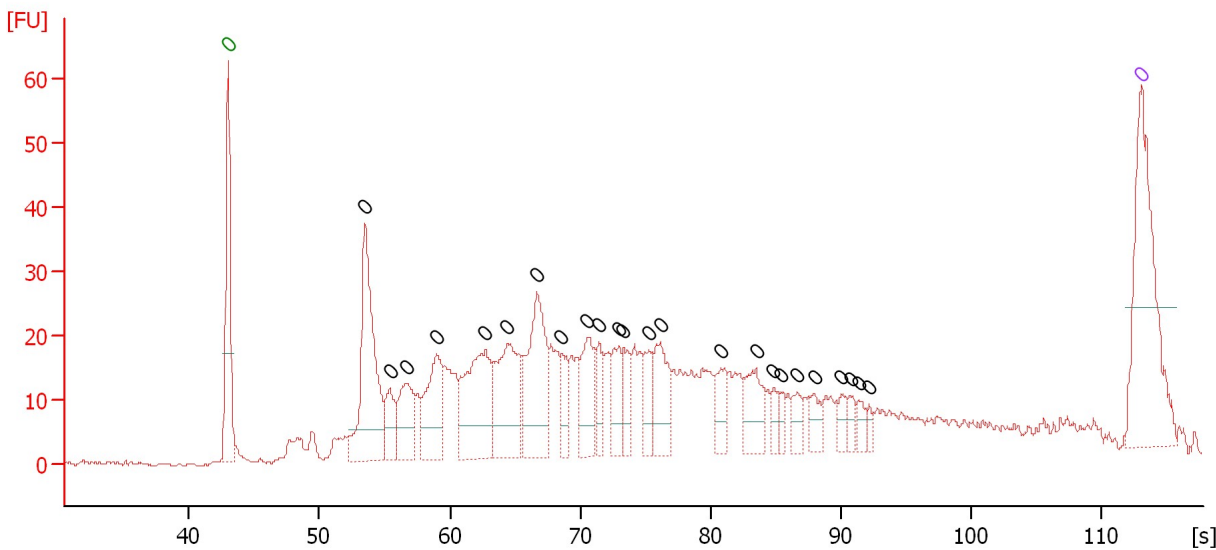
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.00
2	0	0.00	0.0		49.32
3	0	0.00	0.0		53.48
4	0	0.00	0.0		55.52
5	0	0.00	0.0		58.13
6	0	0.00	0.0		59.11
7	0	0.00	0.0		62.17
8	0	0.00	0.0		62.66
9	0	0.00	0.0		64.50
10	0	0.00	0.0		66.70
11	0	0.00	0.0		68.98
12	0	0.00	0.0		69.80
13	0	0.00	0.0		71.07
14	0	0.00	0.0		72.90
15	0	0.00	0.0		74.98
16	0	0.00	0.0		77.71
17	0	0.00	0.0		79.51
18	0	0.00	0.0		81.39
19	0	0.00	0.0		82.00
20	0	0.00	0.0		82.98
21	0	0.00	0.0	Upper Marker	113.00
22	0	0.00	0.0		113.16
23	0	0.00	0.0		114.84

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

Lettuce Arm EcoT22I



**Overall Results for sample 6 : Lettuce Arm EcoT22I**

Number of peaks found: 24                      Noise: 0.3

**Peak table for sample 6 : Lettuce Arm EcoT22I**

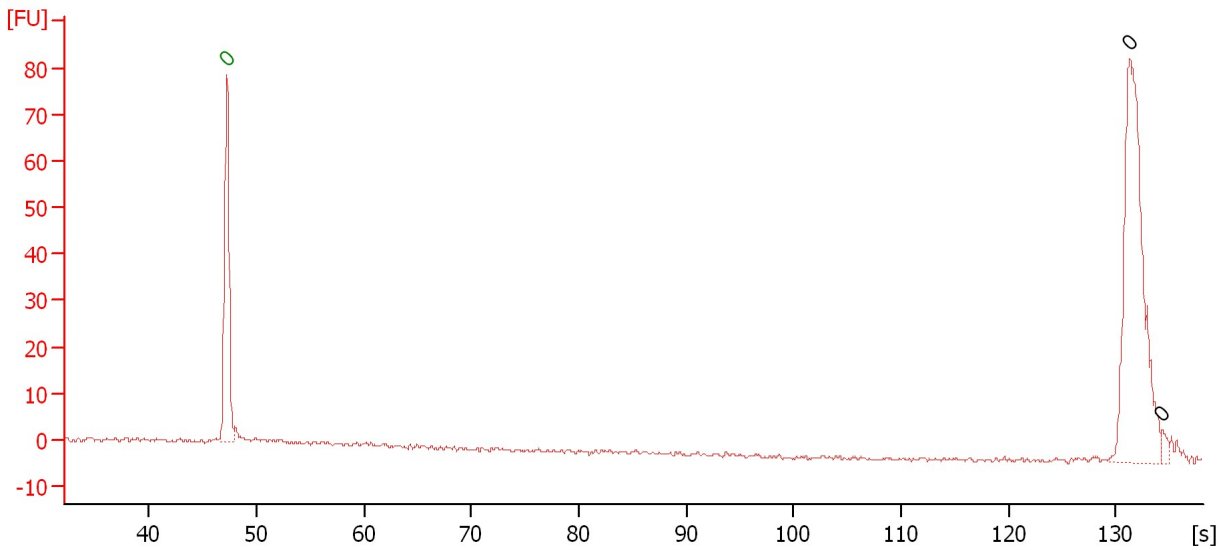
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	43.00
2	0	0.00	0.0		53.51
3	0	0.00	0.0		55.40
4	0	0.00	0.0		56.64
5	0	0.00	0.0		59.03
6	0	0.00	0.0		62.74
7	0	0.00	0.0		64.42
8	0	0.00	0.0		66.69
9	0	0.00	0.0		68.59
10	0	0.00	0.0		70.56
11	0	0.00	0.0		71.43
12	0	0.00	0.0		72.99
13	0	0.00	0.0		73.32
14	0	0.00	0.0		75.26
15	0	0.00	0.0		76.17
16	0	0.00	0.0		80.78
17	0	0.00	0.0		83.50
18	0	0.00	0.0		84.86
19	0	0.00	0.0		85.44
20	0	0.00	0.0		86.67
21	0	0.00	0.0		87.95
22	0	0.00	0.0		90.09
23	0	0.00	0.0		90.71
24	0	0.00	0.0		91.37
25	0	0.00	0.0		92.19
26	0	0.00	0.0	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

sample 7



**Overall Results for sample 7 : sample 7**

Number of peaks found: 2                      Noise: 0.4

**Peak table for sample 7 : sample 7**

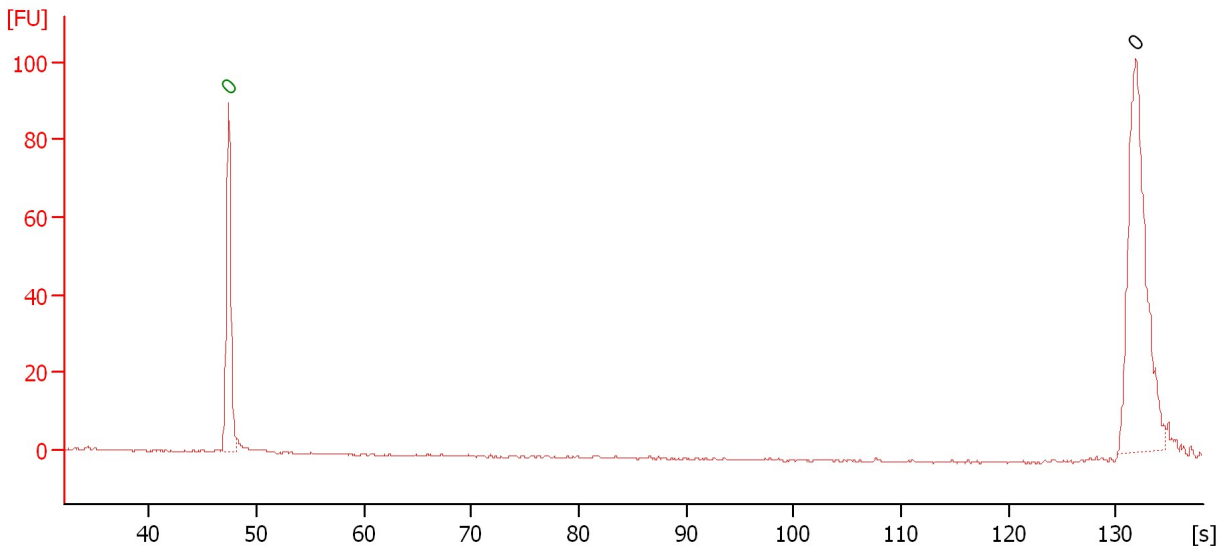
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	47.25
2	0	0.00	0.0		131.30
3	0	0.00	0.0		134.30

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

sample 8



**Overall Results for sample 8 : sample 8**

Number of peaks found: 1                      Noise: 0.3

**Peak table for sample 8 : sample 8**

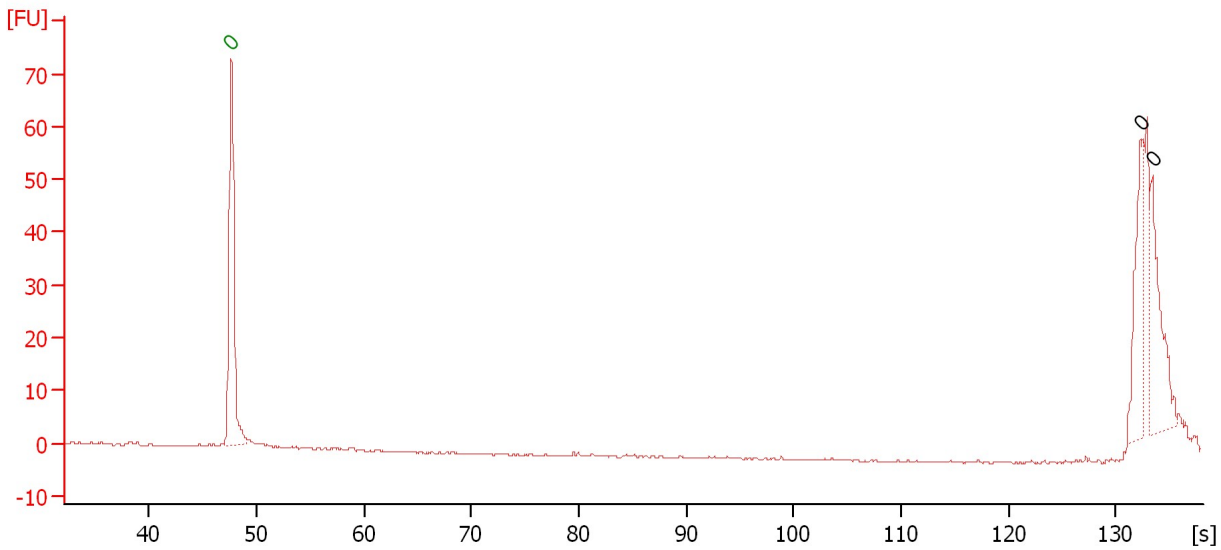
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	47.40
2	0	0.00	0.0		131.85

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

sample 9



**Overall Results for sample 9 : sample 9**

Number of peaks found: 2                      Noise: 0.1

**Peak table for sample 9 : sample 9**

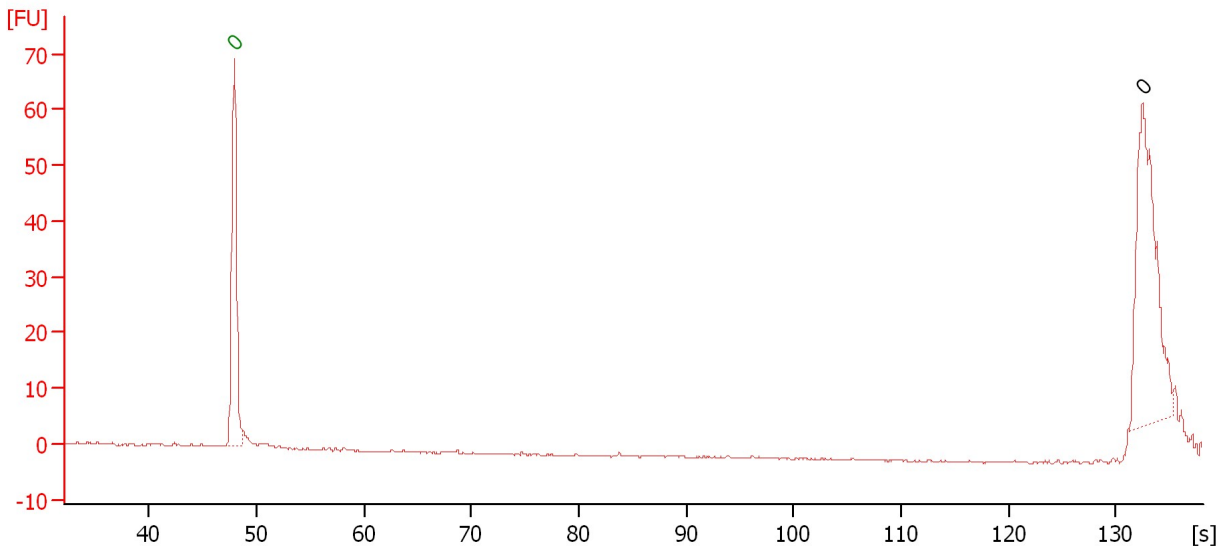
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	47.65
2	0	0.00	0.0		132.30
3	0	0.00	0.0		133.40

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

sample 10



**Overall Results for sample 10 : sample 10**

Number of peaks found: 1 Noise: 0.1

**Peak table for sample 10 : sample 10**

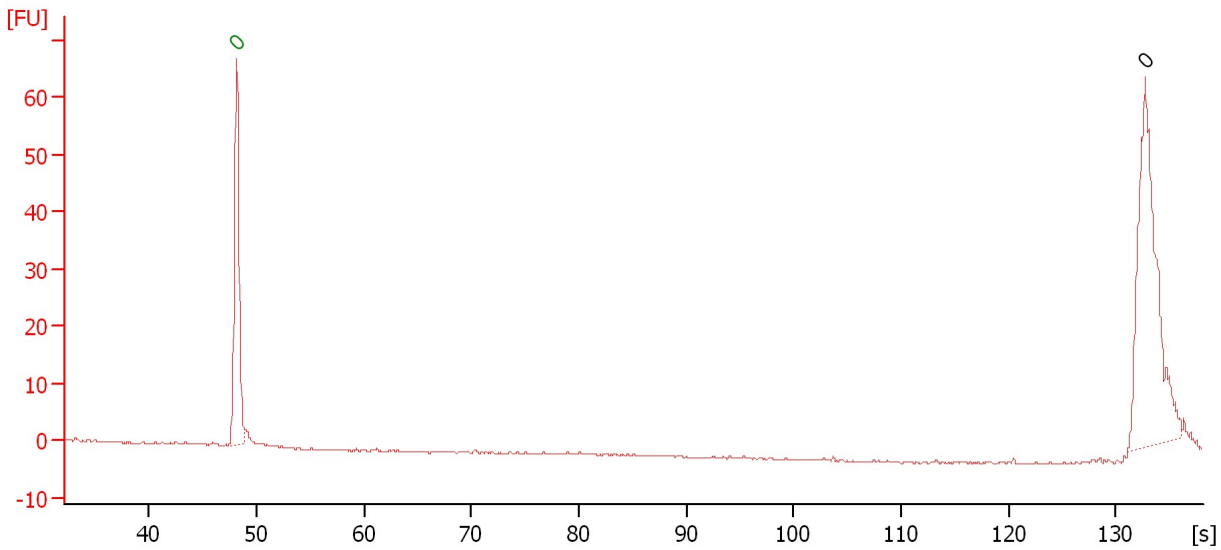
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	47.90
2	0	0.00	0.0		132.50

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 AM

**Electropherogram Summary Continued ...**

sample 11



**Overall Results for sample 11 : sample 11**

Number of peaks found: 1                      Noise: 0.1

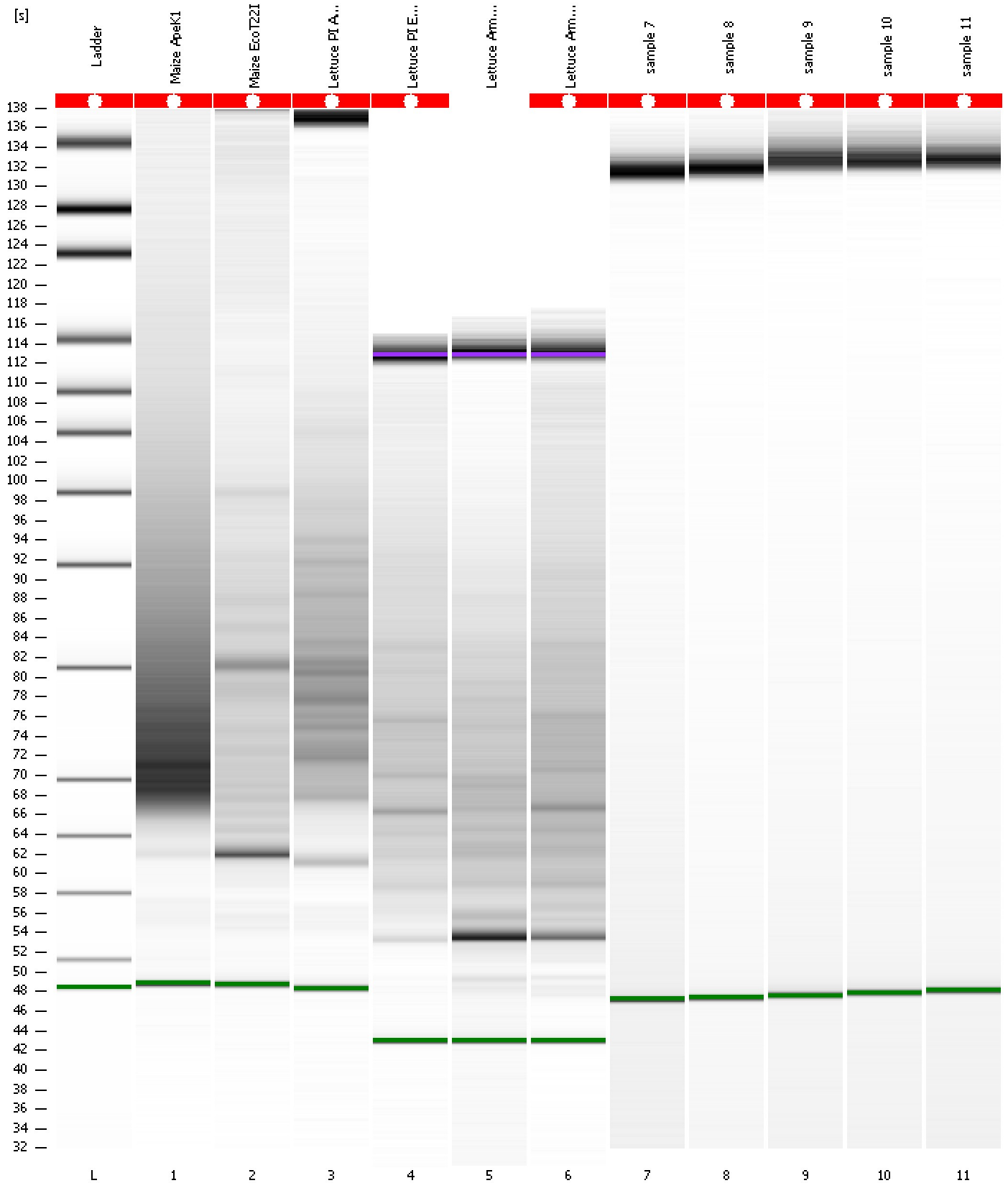
**Peak table for sample 11 : sample 11**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	48.15
2	0	0.00	0.0		132.75

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
Modified: 1/21/2015 11:14:13 AM

Gel Image





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-01-21\2015-01-21\_001.xad

Created: 1/21/2015 10:32:50 AM  
 Modified: 1/21/2015 11:14:13 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		1/21/2015 11:14:08 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-01-21\2015-01-21_001.xad)		Instrument	Run		1/21/2015 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/21/2015 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/21/2015 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/21/2015 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/21/2015 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/21/2015 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/21/2015 10:32:55 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1