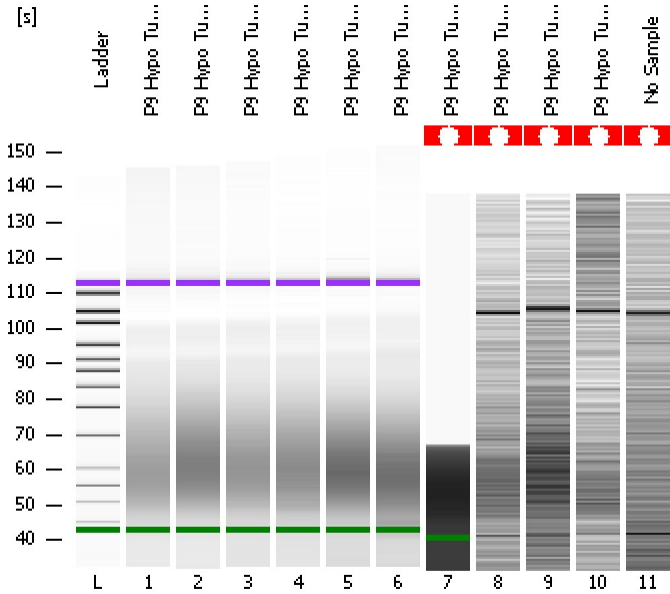


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Electrophoresis File Run Summary



Instrument Information:

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

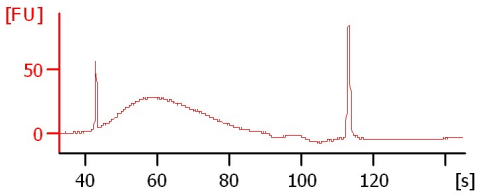
Assay Information:

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

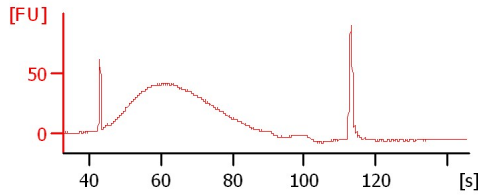
Chip Information:

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

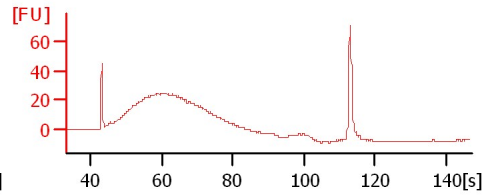
P9 Hypo Tube 1



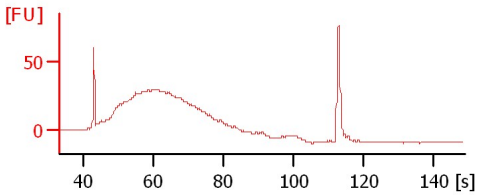
P9 Hypo Tube 2



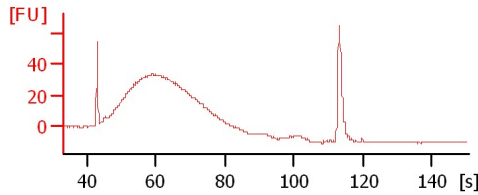
P9 Hypo Tube 3



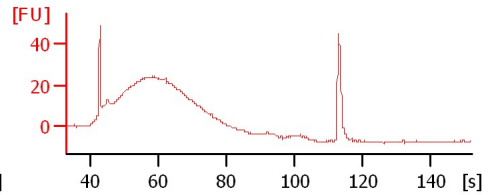
P9 Hypo Tube 4



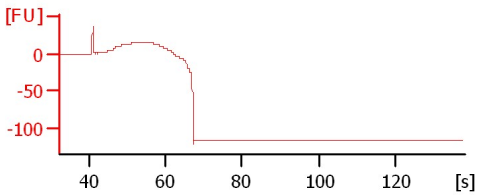
P9 Hypo Tube 5



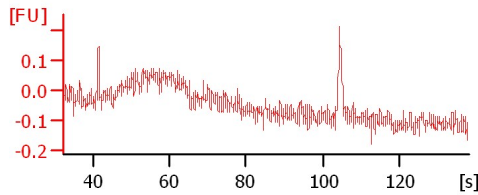
P9 Hypo Tube 6



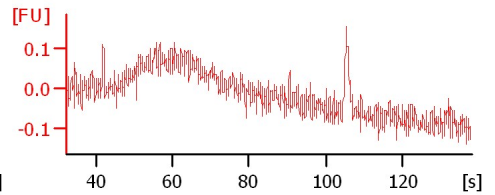
P9 Hypo Tube 7



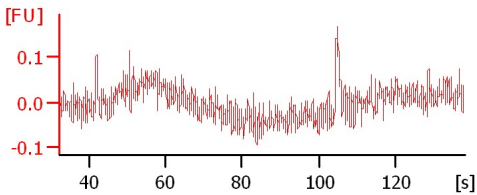
P9 Hypo Tube 8



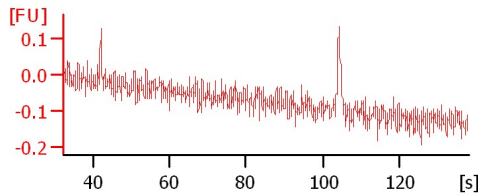
P9 Hypo Tube 9



P9 Hypo Tube 10



No Sample



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
P9 Hypo Tube 1		<input type="checkbox"/>	✓			
P9 Hypo Tube 2		<input type="checkbox"/>	✓			
P9 Hypo Tube 3		<input type="checkbox"/>	✓			
P9 Hypo Tube 4		<input type="checkbox"/>	✓			
P9 Hypo Tube 5		<input type="checkbox"/>	✓			
P9 Hypo Tube 6		<input type="checkbox"/>	✓			
P9 Hypo Tube 7		<input type="checkbox"/>	✓			
P9 Hypo Tube 8		<input type="checkbox"/>	✓			
P9 Hypo Tube 9		<input type="checkbox"/>	✓			
P9 Hypo Tube 10		<input type="checkbox"/>	✓			
No Sample		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

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

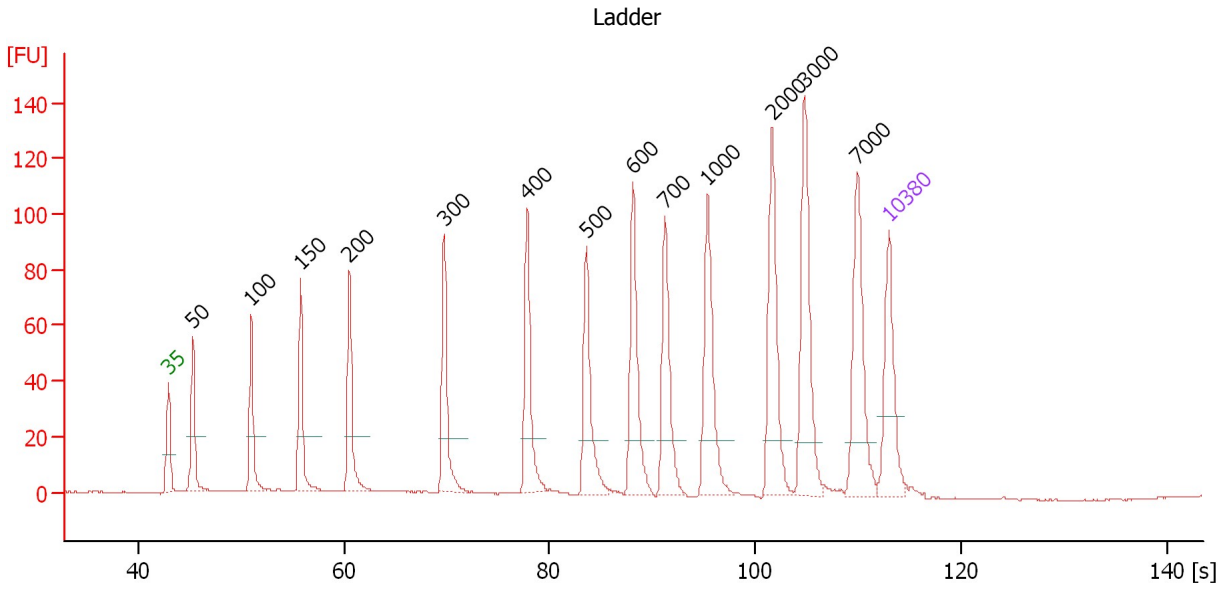
Ladder

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:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

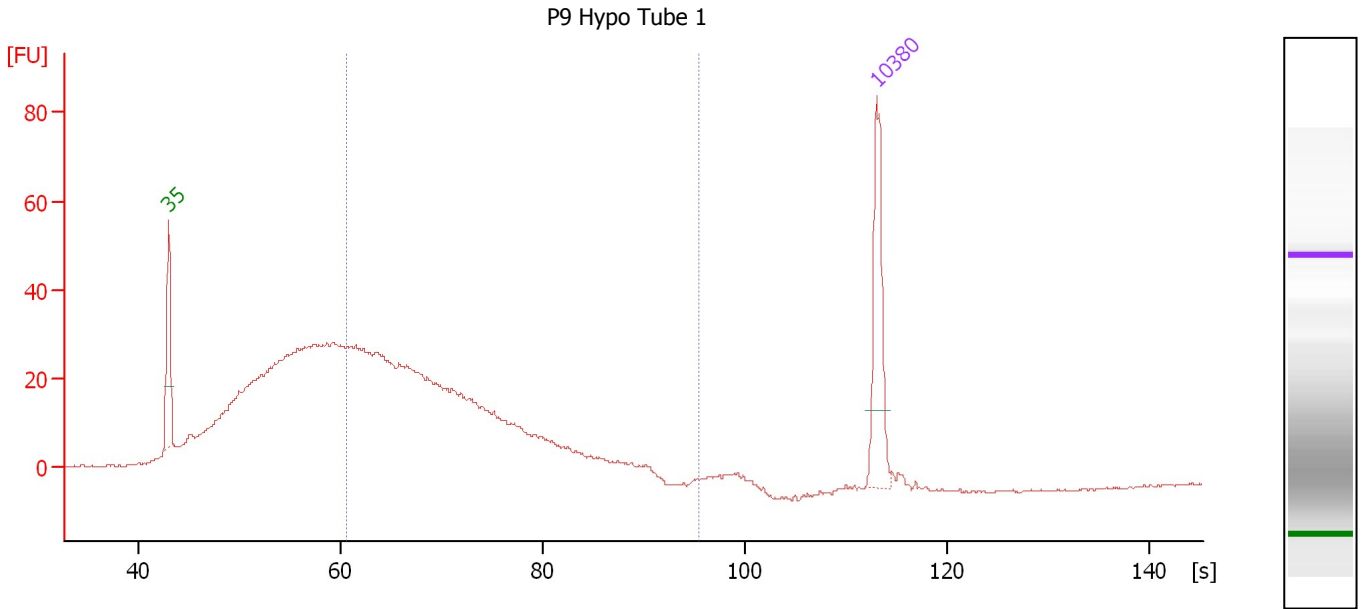
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.35
3	100	150.00	2,272.7	Ladder Peak	51.03
4	150	150.00	1,515.2	Ladder Peak	55.83
5	200	150.00	1,136.4	Ladder Peak	60.58
6	300	150.00	757.6	Ladder Peak	69.76
7	400	150.00	568.2	Ladder Peak	77.84
8	500	150.00	454.5	Ladder Peak	83.58
9	600	150.00	378.8	Ladder Peak	88.12
10	700	150.00	324.7	Ladder Peak	91.25
11	1,000	150.00	227.3	Ladder Peak	95.37
12	2,000	150.00	113.6	Ladder Peak	101.63
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.92
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : P9 Hypo Tube 1

Number of peaks found: 0 Corr. Area 1: 575.2
 Noise: 0.2

Peak table for sample 1 : P9 Hypo Tube 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	10,380	75.00	10.9	Upper Marker	113.00

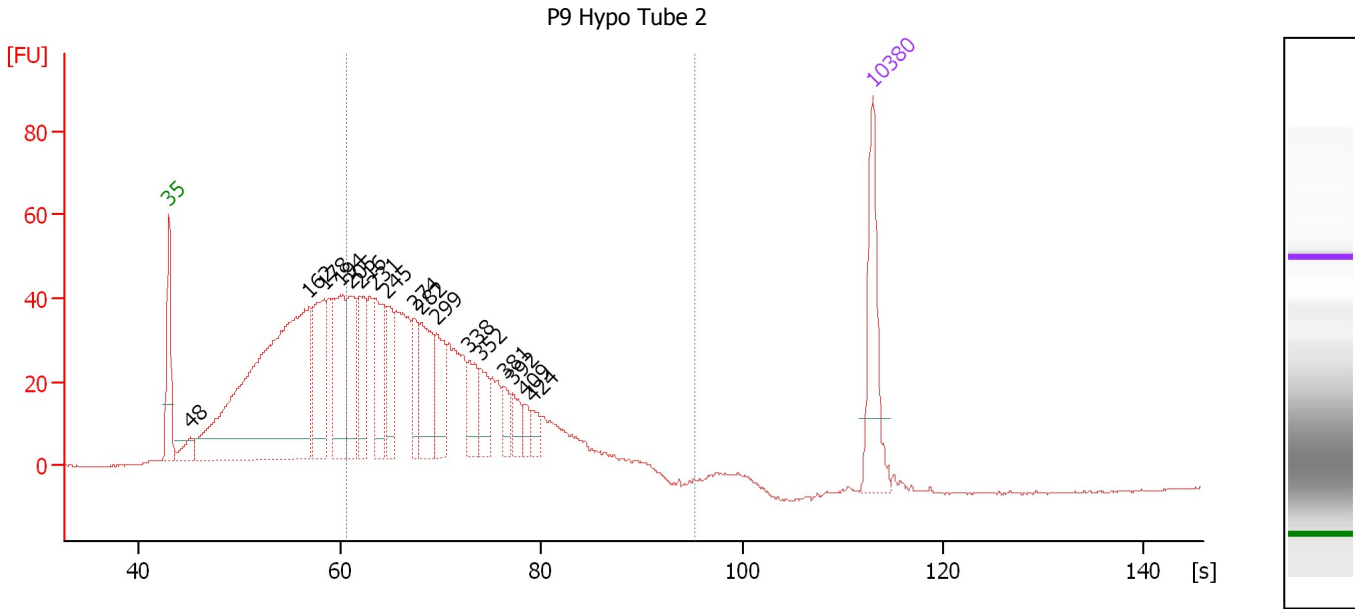
Region table for sample 1 : P9 Hypo Tube 1

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	312	575.2	4,751.2	887.36	49	30.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : P9 Hypo Tube 2

Number of peaks found: 17 Corr. Area 1: 944.3
 Noise: 0.2

Peak table for sample 2 : P9 Hypo Tube 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	48	25.77	808.1		45.08
3	162	657.66	6,160.7		56.95
4	178	126.08	1,076.2		58.44
5	194	117.98	919.6		60.05
6	205	90.53	668.2		61.06
7	216	83.07	583.4		62.02
8	231	81.68	534.7		63.47
9	245	56.20	347.8		64.69
10	274	44.41	245.7		67.37
11	282	88.03	472.8		68.11
12	299	58.32	295.5		69.66
13	338	41.87	187.4		72.87
14	352	34.98	150.7		73.94
15	381	19.74	78.4		76.34
16	392	20.87	80.6		77.20
17	409	13.91	51.5		78.37
18	424	14.44	51.6		79.23
19	10,380	75.00	10.9	Upper Marker	113.00

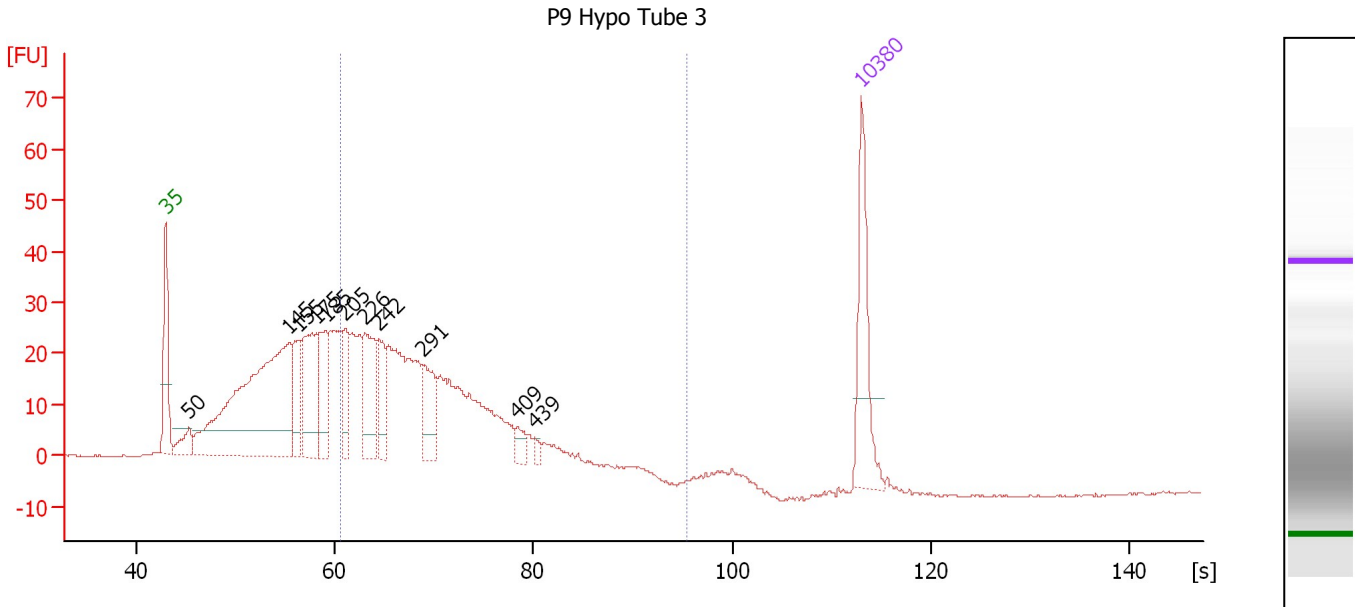
Region table for sample 2 : P9 Hypo Tube 2

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	318	944.3	6,489.2	1,229.96	55	30.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : P9 Hypo Tube 3

Number of peaks found: 11 Corr. Area 1: 525.0
 Noise: 0.2

Peak table for sample 3 : P9 Hypo Tube 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	50	29.32	891.0		45.32
3	145	465.89	4,858.9		55.38
4	155	72.30	707.2		56.30
5	175	129.72	1,124.2		58.19
6	185	70.99	583.0		59.11
7	205	55.73	412.7		61.00
8	226	97.40	651.9		63.00
9	242	49.63	310.4		64.46
10	291	61.10	318.6		68.89
11	409	14.28	52.9		78.35
12	439	6.31	21.8		80.08
13	10,380	75.00	10.9	Upper Marker	113.00

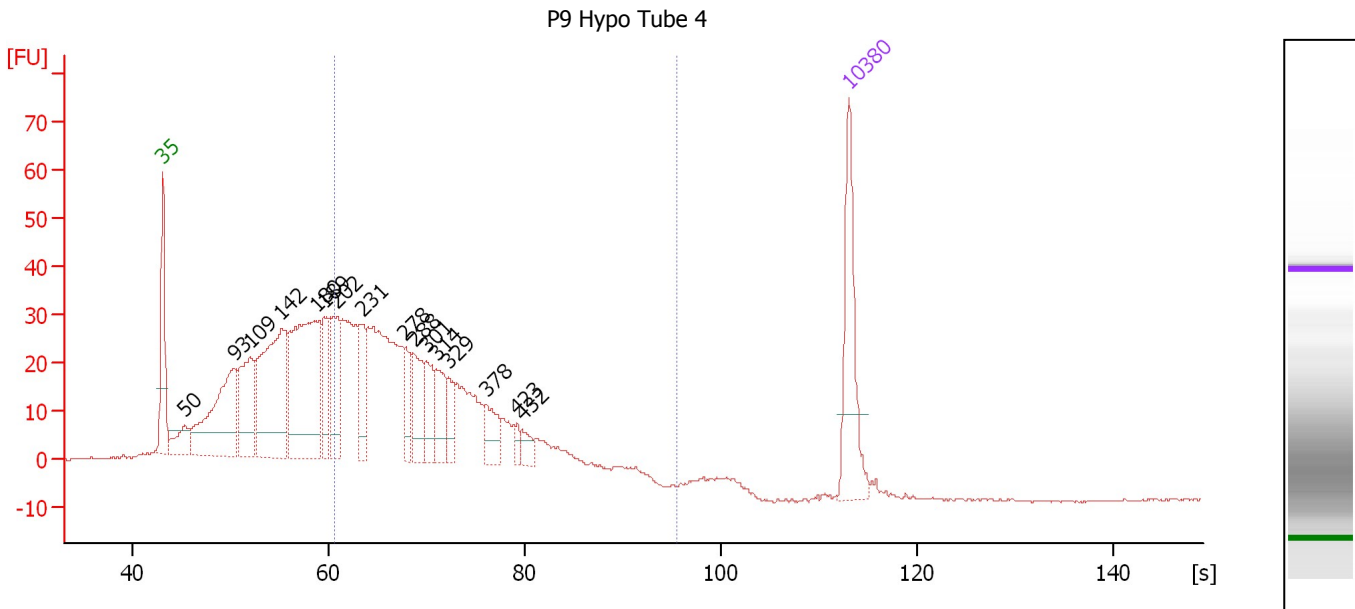
Region table for sample 3 : P9 Hypo Tube 3

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	305	525.0	4,765.7	880.65	52	28.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : P9 Hypo Tube 4

Number of peaks found: 16 Corr. Area 1: 653.7
 Noise: 0.2

Peak table for sample 4 : P9 Hypo Tube 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	50	35.80	1,091.3		45.30
3	93	189.19	3,068.4		50.28
4	109	108.02	1,504.8		51.87
5	142	234.25	2,491.9		55.10
6	180	243.19	2,048.8		58.67
7	189	59.09	475.0		59.49
8	202	69.33	520.4		60.75
9	231	46.82	307.0		63.43
10	278	34.53	188.5		67.70
11	288	50.46	265.7		68.63
12	301	39.29	197.8		69.84
13	314	41.38	199.8		70.88
14	329	22.71	104.5		72.14
15	378	31.09	124.8		76.03
16	423	8.83	31.7		79.15
17	432	12.52	43.9		79.70
18	10,380	75.00	10.9	Upper Marker	113.00

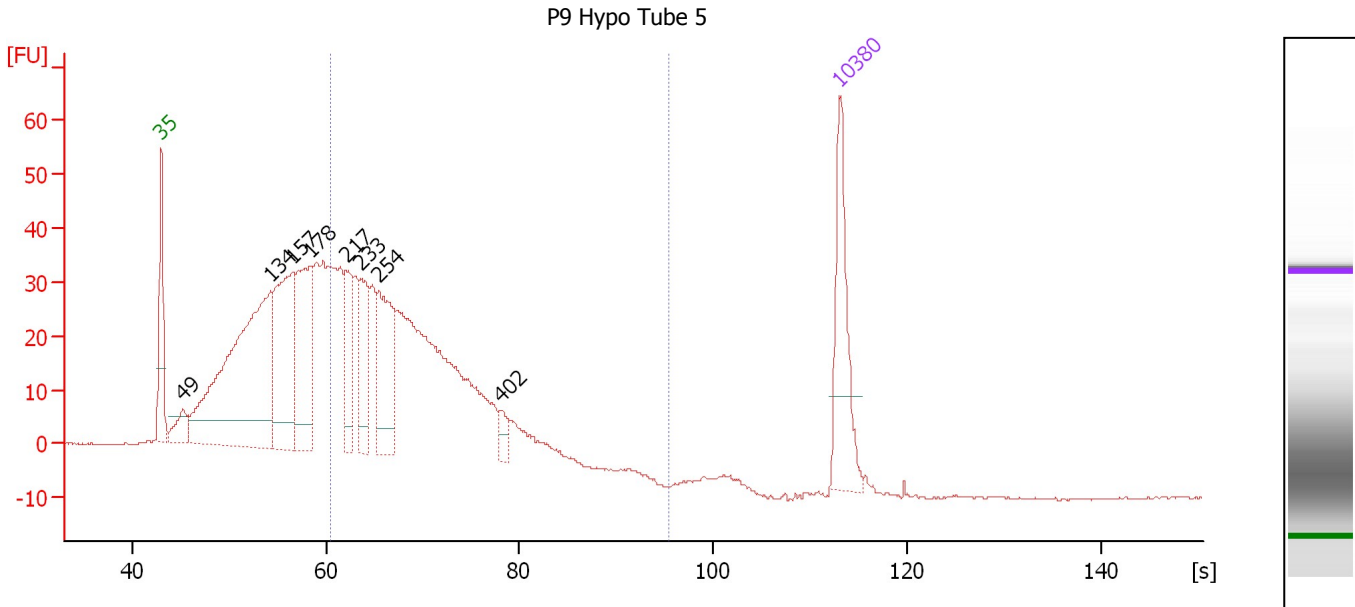
Region table for sample 4 : P9 Hypo Tube 4

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	314	653.7	5,001.5	937.97	51	31.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : P9 Hypo Tube 5

Number of peaks found: 8 Corr. Area 1: 646.4
 Noise: 0.2

Peak table for sample 5 : P9 Hypo Tube 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	49	32.92	1,014.3		45.22
3	134	453.60	5,124.7		54.31
4	157	202.68	1,952.5		56.52
5	178	162.87	1,384.0		58.52
6	217	70.06	489.6		62.12
7	233	80.18	521.1		63.62
8	254	116.49	695.9		65.50
9	402	13.58	51.2		77.97
10	10,380	75.00	10.9	Upper Marker	113.00

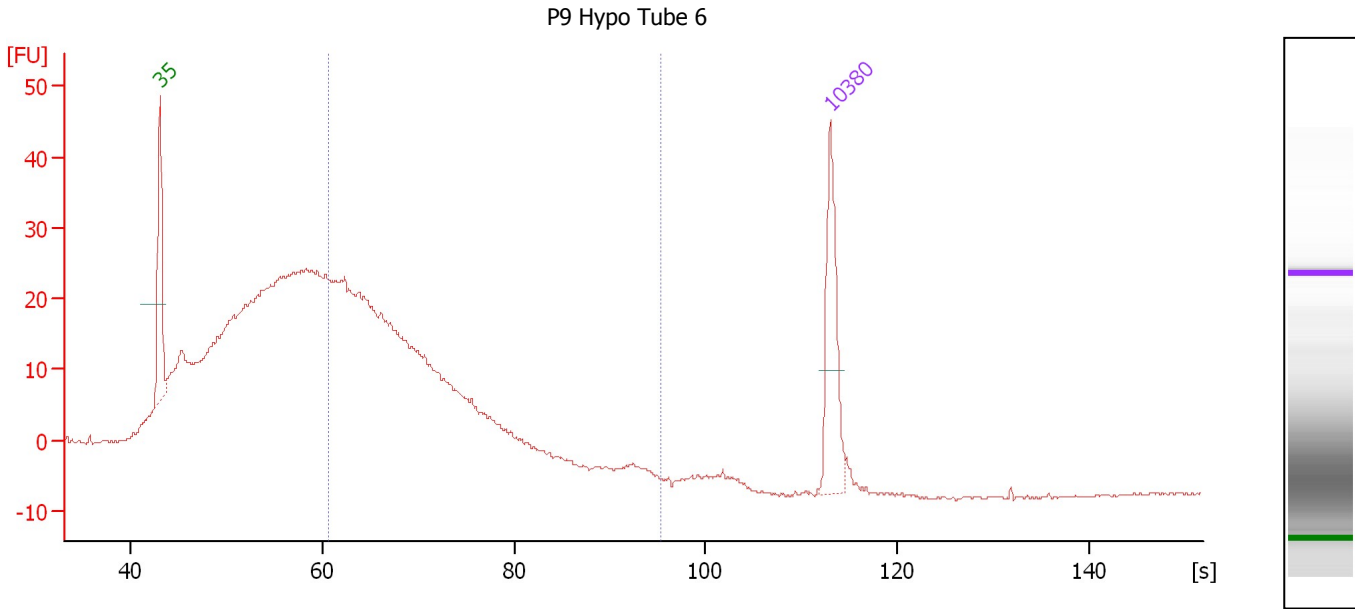
Region table for sample 5 : P9 Hypo Tube 5

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	293	646.4	5,051.1	915.19	49	24.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : P9 Hypo Tube 6

Number of peaks found: 0 Corr. Area 1: 417.6
 Noise: 0.2

Peak table for sample 6 : P9 Hypo Tube 6

Pea k	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	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 6 : P9 Hypo Tube 6

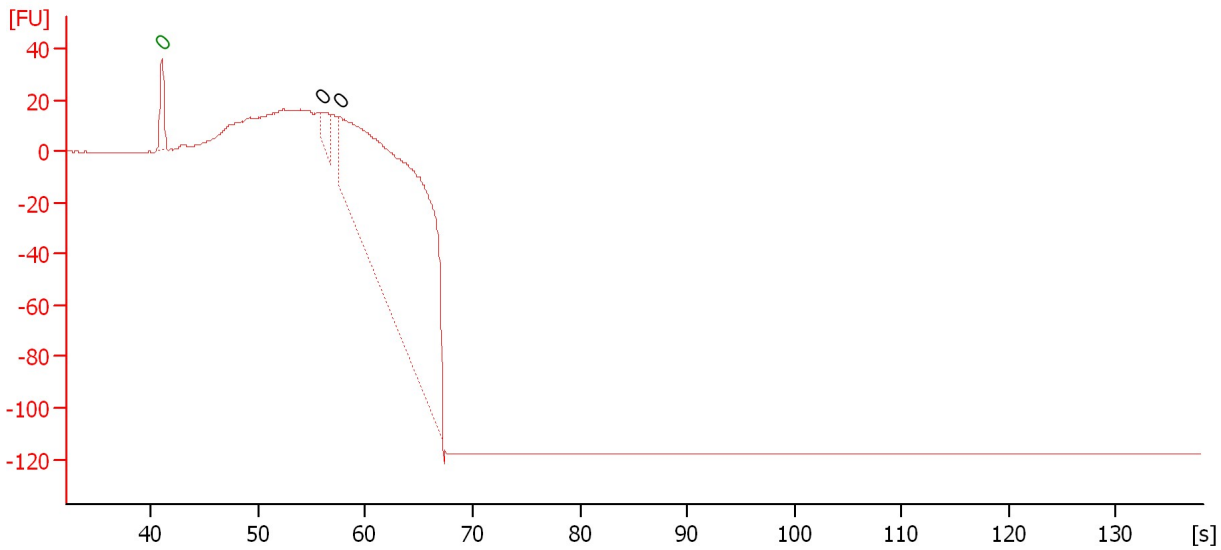
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	288	417.6	5,128.6	915.11	41	25.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...

P9 Hypo Tube 7



Overall Results for sample 7 : P9 Hypo Tube 7

Number of peaks found: 2 Noise: 0.0

Peak table for sample 7 : P9 Hypo Tube 7

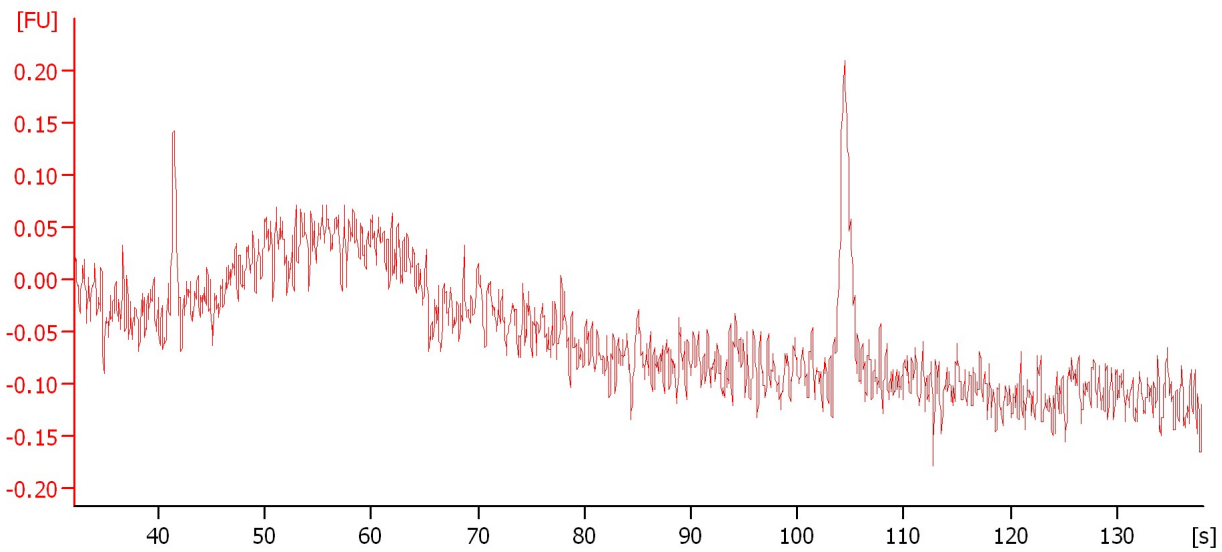
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	41.00
2	0	0.00	0.0		56.00
3	0	0.00	0.0		57.65

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...

P9 Hypo Tube 8



Overall Results for sample 8 : P9 Hypo Tube 8

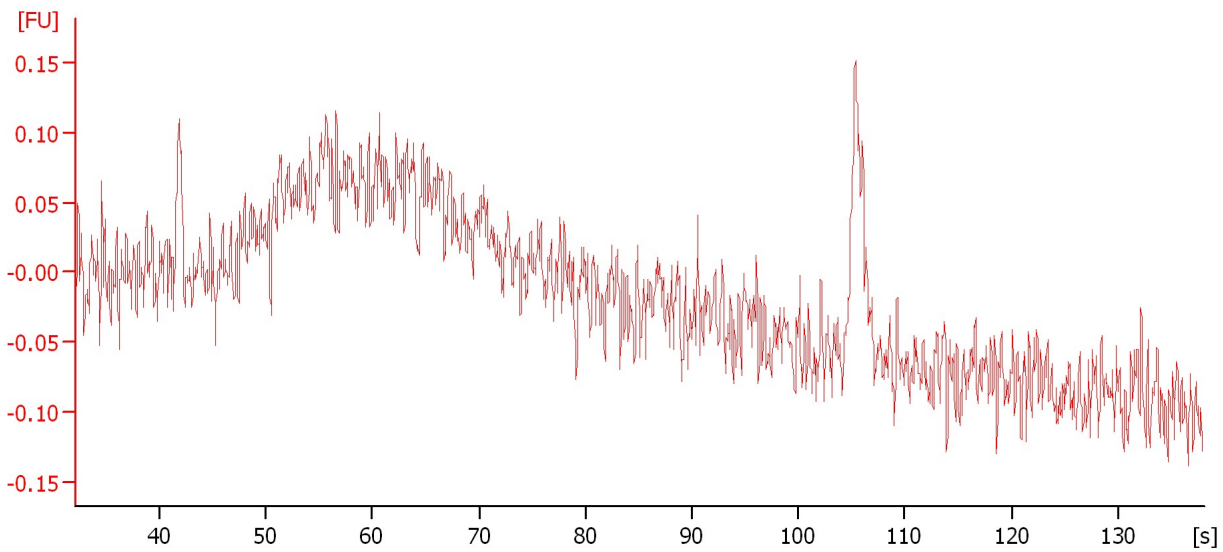
Noise: 0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...

P9 Hypo Tube 9



Overall Results for sample 9 : P9 Hypo Tube 9

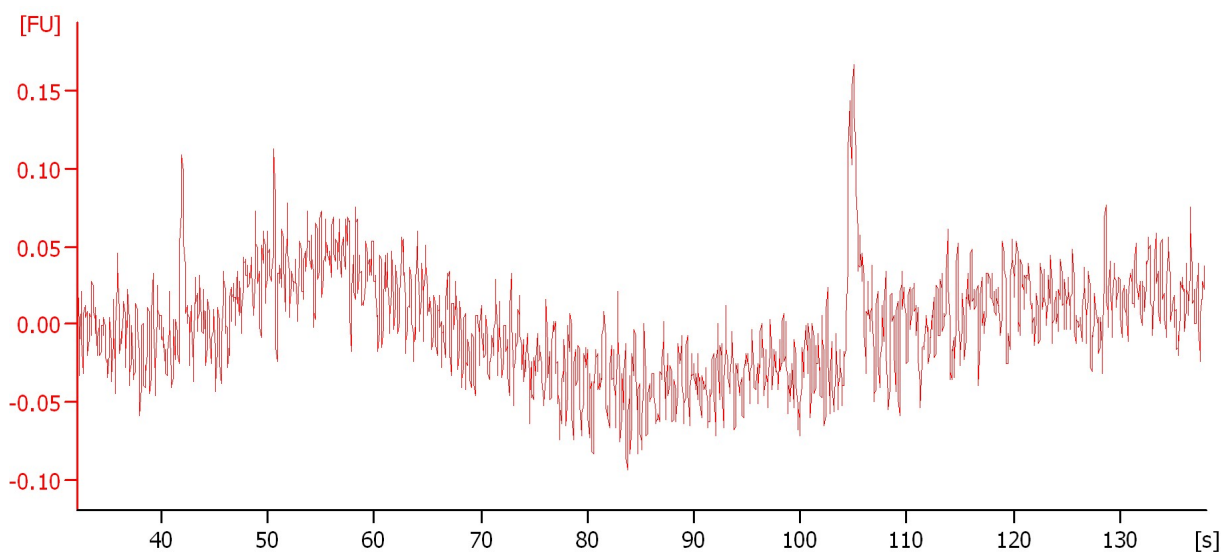
Noise: 0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...

P9 Hypo Tube 10



Overall Results for sample 10 : P9 Hypo Tube 10

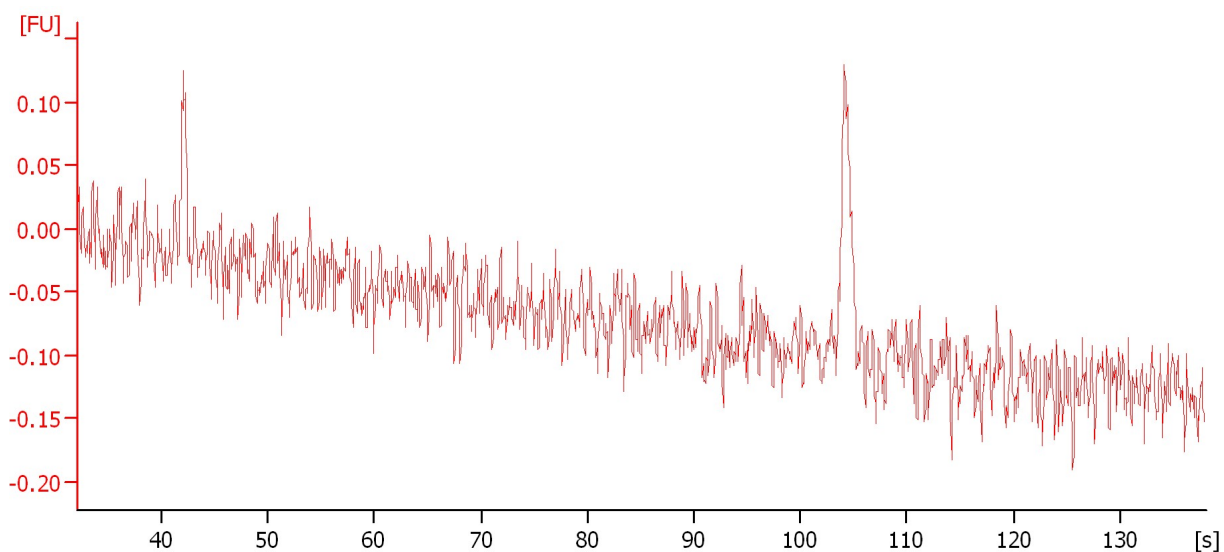
Noise: 0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Electropherogram Summary Continued ...

No Sample



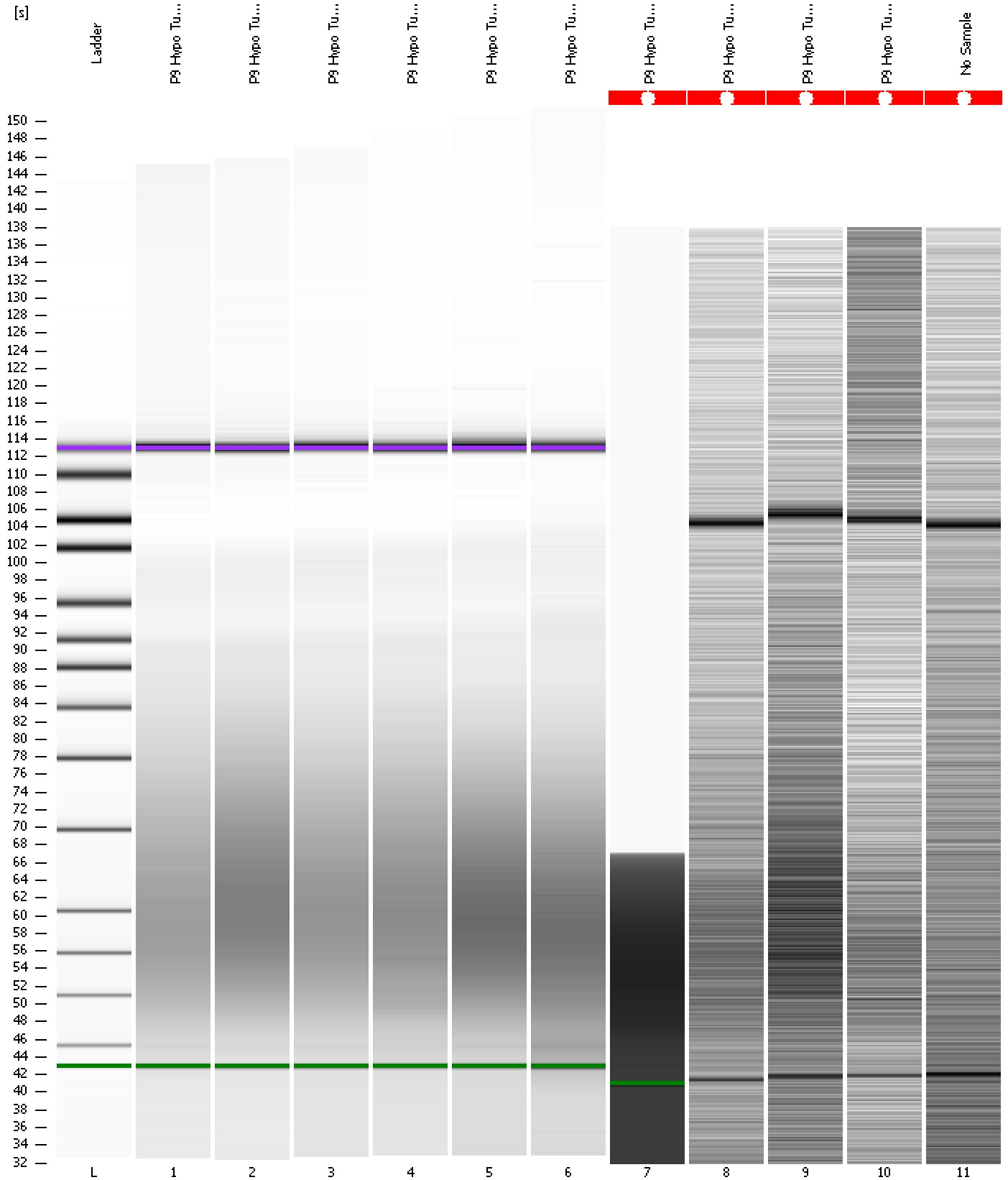
Overall Results for sample 11 : No Sample

Noise: 0.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
Modified: 9/7/2016 4:11:42 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad

Created: 9/7/2016 3:30:24 PM
 Modified: 9/7/2016 4:11:42 PM

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		9/7/2016 4:11:42 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-09-07\2016-09-07_003.xad)		Instrument	Run		9/7/2016 3:30:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/7/2016 3:30:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/7/2016 3:30:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/7/2016 3:30:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/7/2016 3:30:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/7/2016 3:30:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/7/2016 3:30:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1