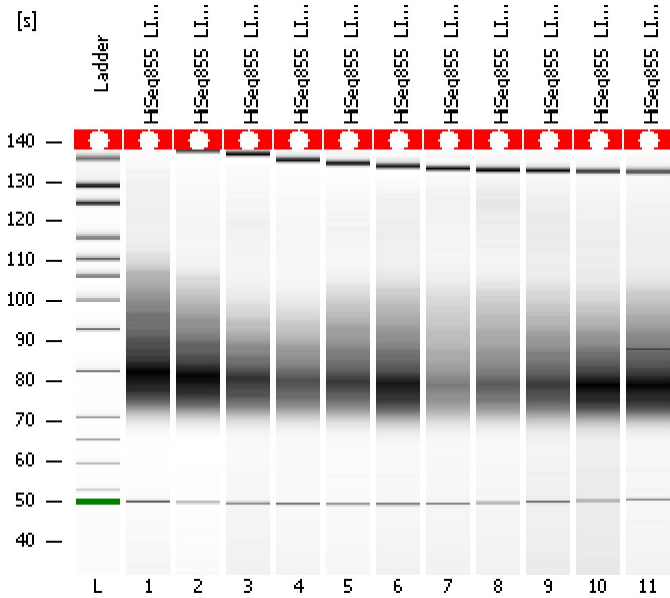


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
Modified: 4/6/2017 10:59:19 AM

Electrophoresis File Run Summary



Instrument Information:

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

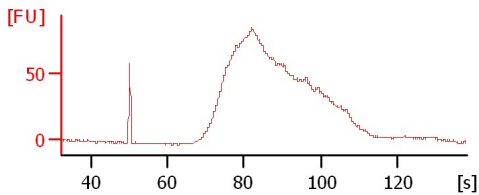
Assay Information:

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

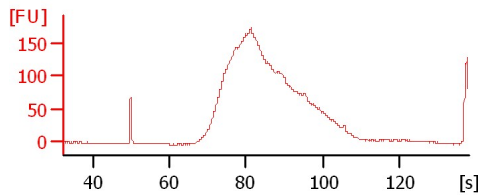
Chip Information:

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

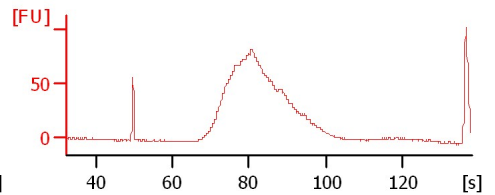
HiSeq855_LIB-60 (1:2)



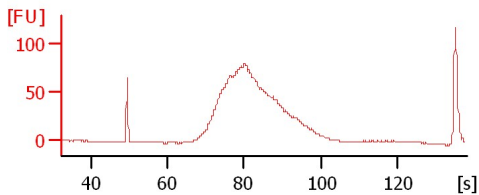
HiSeq855_LIB-61 (1:2)



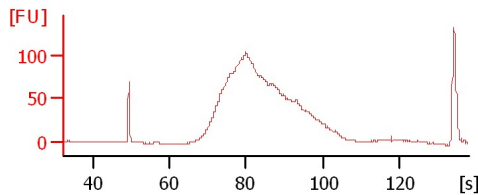
HiSeq855_LIB-62 (1:2)



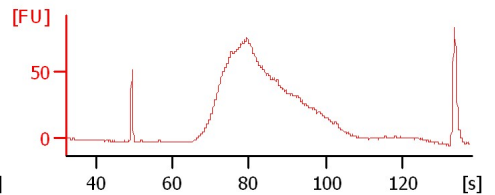
HiSeq855_LIB-63 (1:2)



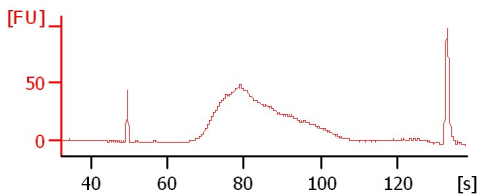
HiSeq855_LIB-64 (1:2)



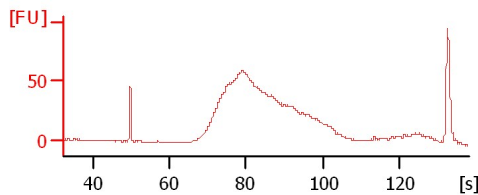
HiSeq855_LIB-65 (1:2)



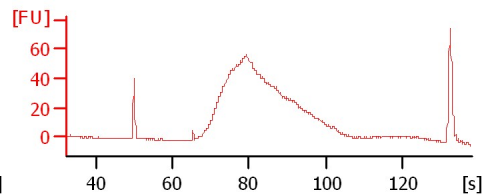
HiSeq855_LIB-66 (1:2)



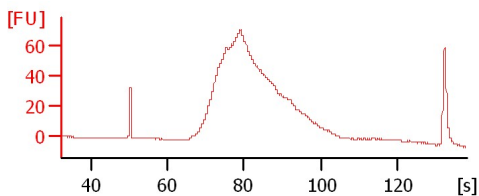
HiSeq855_LIB-67 (1:2)



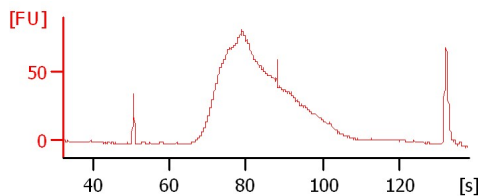
HiSeq855_LIB-68 (1:2)



HiSeq855_LIB-69 (1:2)



HiSeq855_LIB-70 (1:2)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
Modified: 4/6/2017 10:59:19 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HiSeq855_LIB-60 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-61 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-62 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-63 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-64 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-65 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-66 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-67 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-68 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-69 (1:2)		<input type="checkbox"/>	✓			
HiSeq855_LIB-70 (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:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
Modified: 4/6/2017 10:59:19 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

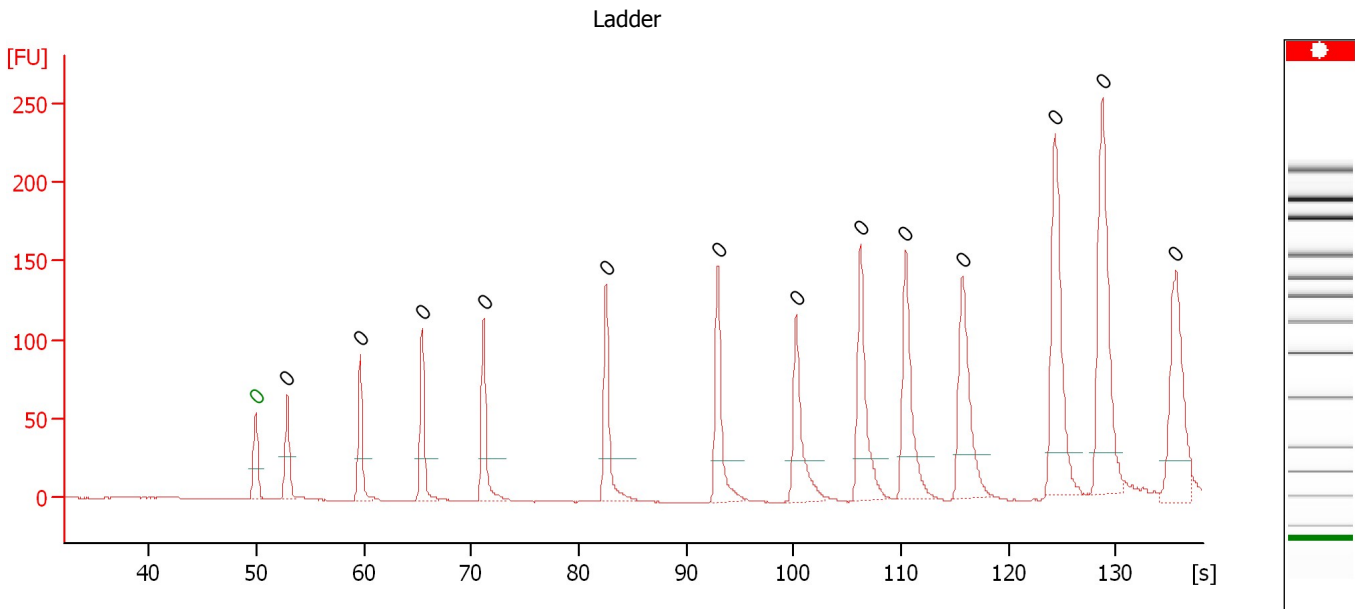
Ladder

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:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

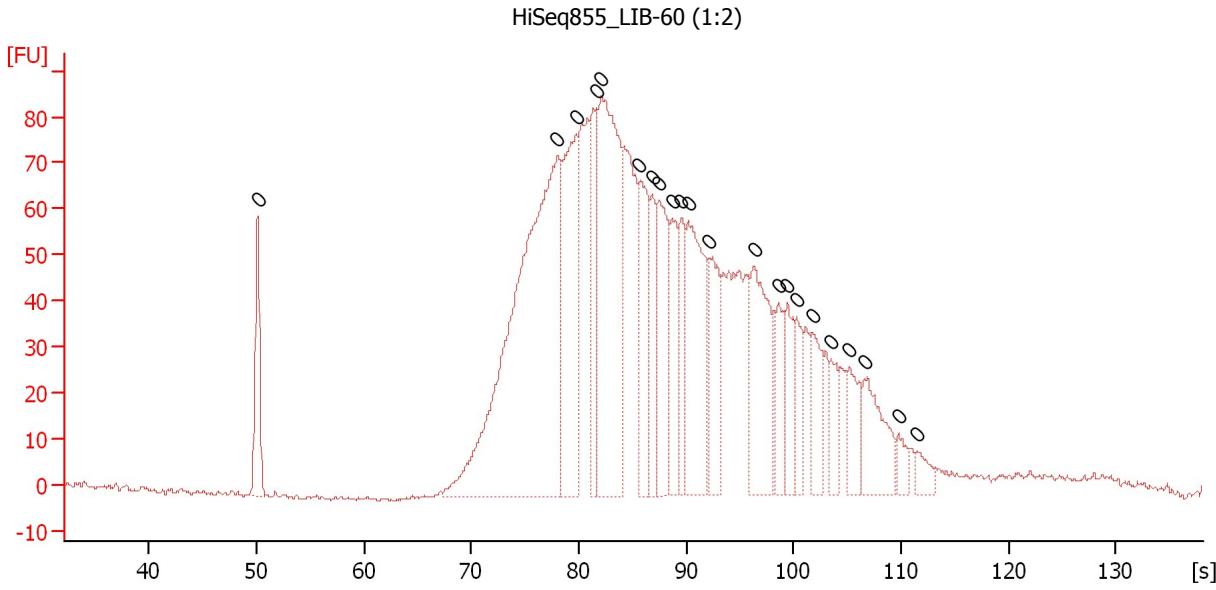
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	49.90
2	0	0.00	0.0	Ladder Peak	52.85
3	0	0.00	0.0	Ladder Peak	59.65
4	0	0.00	0.0	Ladder Peak	65.40
5	0	0.00	0.0	Ladder Peak	71.15
6	0	0.00	0.0	Ladder Peak	82.55
7	0	0.00	0.0	Ladder Peak	92.95
8	0	0.00	0.0	Ladder Peak	100.25
9	0	0.00	0.0	Ladder Peak	106.25
10	0	0.00	0.0	Ladder Peak	110.45
11	0	0.00	0.0	Ladder Peak	115.70
12	0	0.00	0.0	Ladder Peak	124.35
13	0	0.00	0.0	Ladder Peak	128.75
14	0	0.00	0.0	Ladder Peak	135.60

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : HiSeq855 LIB-60 (1:2)

Number of peaks found: 0 Noise: 0.5

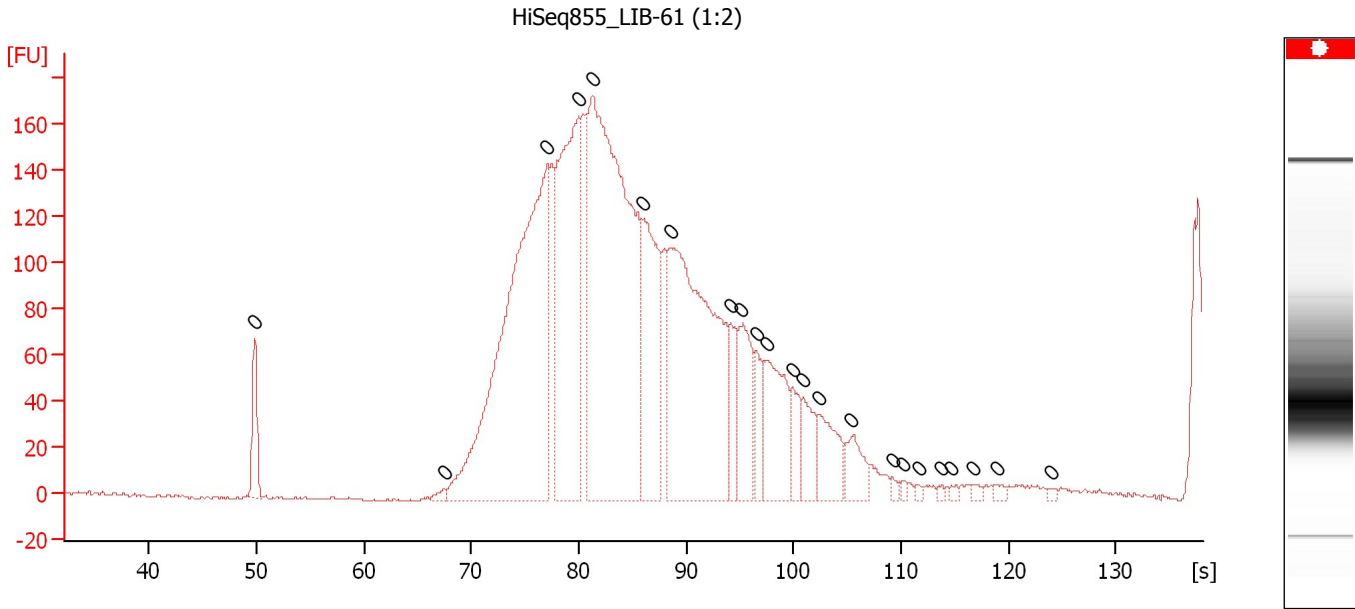
Peak table for sample 1 : HiSeq855 LIB-60 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		50.10
2	0	0.00	0.0		78.00
3	0	0.00	0.0		79.75
4	0	0.00	0.0		81.65
5	0	0.00	0.0		82.05
6	0	0.00	0.0		85.65
7	0	0.00	0.0		86.80
8	0	0.00	0.0		87.45
9	0	0.00	0.0		88.70
10	0	0.00	0.0		89.55
11	0	0.00	0.0		90.20
12	0	0.00	0.0		92.10
13	0	0.00	0.0		96.35
14	0	0.00	0.0		98.60
15	0	0.00	0.0		99.40
16	0	0.00	0.0		100.30
17	0	0.00	0.0		101.75
18	0	0.00	0.0		103.45
19	0	0.00	0.0		105.20
20	0	0.00	0.0		106.65
21	0	0.00	0.0		109.80
22	0	0.00	0.0		111.55

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : HiSeq855 LIB-61 (1:2)

Number of peaks found: 0 Noise: 0.5

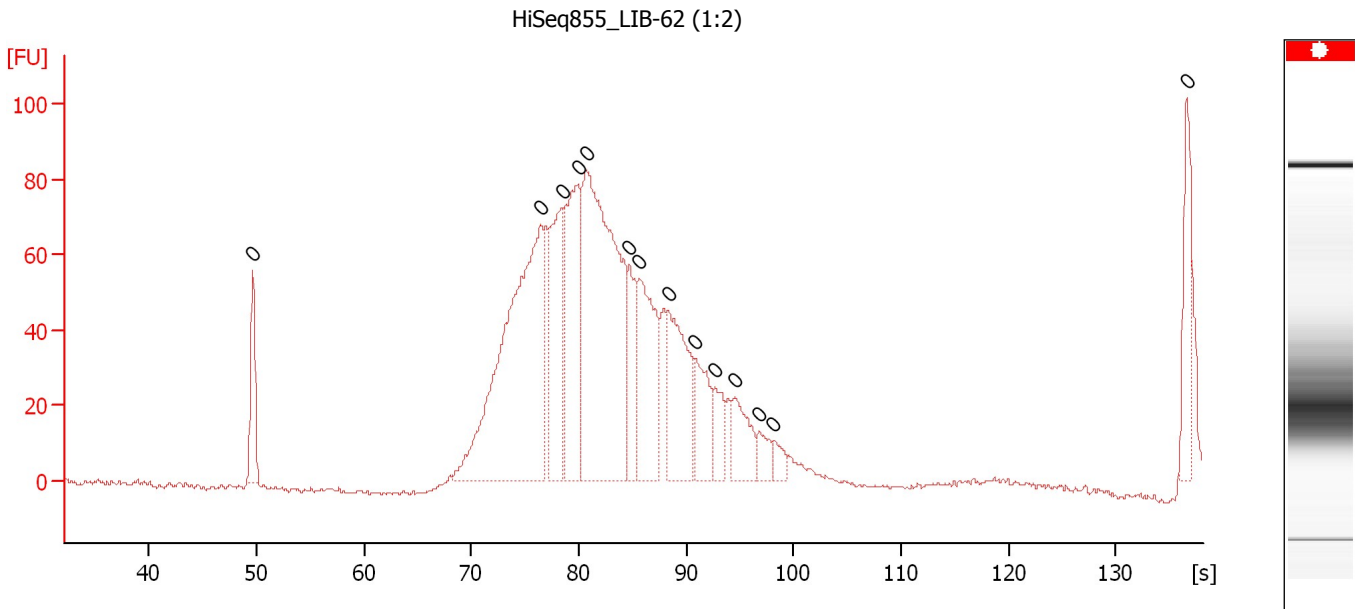
Peak table for sample 2 : HiSeq855 LIB-61 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.80
2	0	0.00	0.0		67.45
3	0	0.00	0.0		77.10
4	0	0.00	0.0		79.95
5	0	0.00	0.0		81.25
6	0	0.00	0.0		85.90
7	0	0.00	0.0		88.60
8	0	0.00	0.0		94.15
9	0	0.00	0.0		95.10
10	0	0.00	0.0		96.50
11	0	0.00	0.0		97.50
12	0	0.00	0.0		99.95
13	0	0.00	0.0		100.95
14	0	0.00	0.0		102.40
15	0	0.00	0.0		105.40
16	0	0.00	0.0		109.20
17	0	0.00	0.0		110.20
18	0	0.00	0.0		111.75
19	0	0.00	0.0		113.70
20	0	0.00	0.0		114.75
21	0	0.00	0.0		116.80
22	0	0.00	0.0		118.90
23	0	0.00	0.0		123.90

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : HiSeq855 LIB-62 (1:2)

Number of peaks found: 0 Noise: 0.5

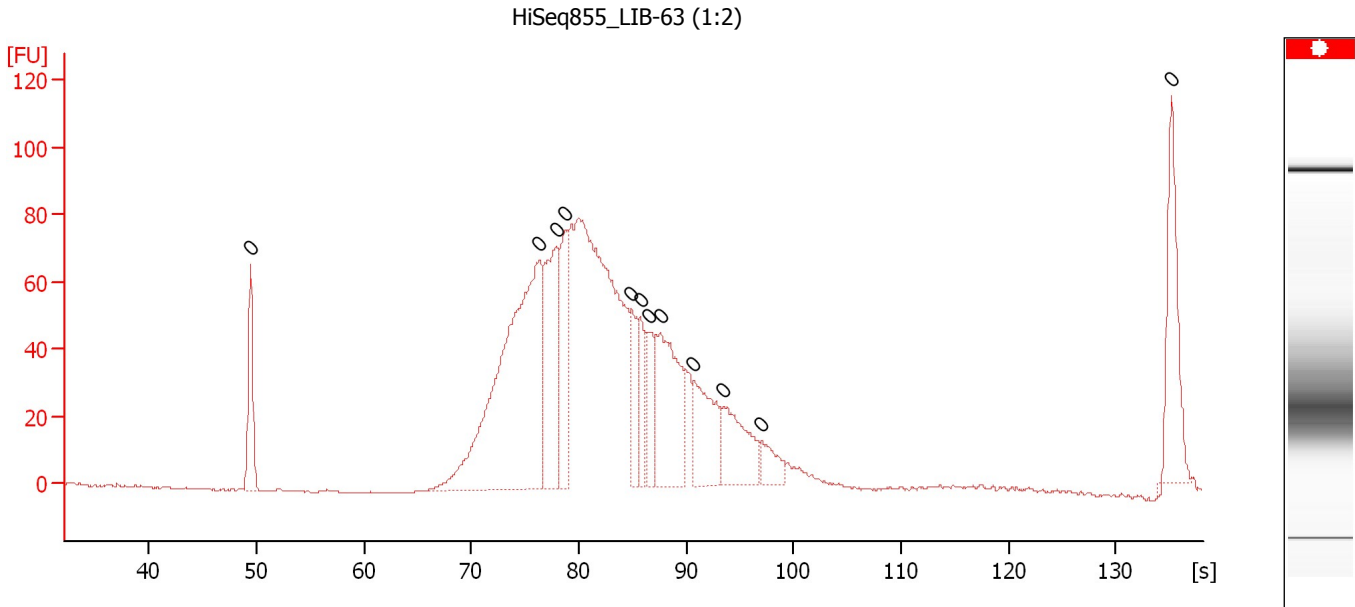
Peak table for sample 3 : HiSeq855 LIB-62 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.65
2	0	0.00	0.0		76.45
3	0	0.00	0.0		78.45
4	0	0.00	0.0		79.90
5	0	0.00	0.0		80.70
6	0	0.00	0.0		84.70
7	0	0.00	0.0		85.65
8	0	0.00	0.0		88.35
9	0	0.00	0.0		90.85
10	0	0.00	0.0		92.65
11	0	0.00	0.0		94.55
12	0	0.00	0.0		96.80
13	0	0.00	0.0		98.10
14	0	0.00	0.0		136.60

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HiSeq855 LIB-63 (1:2)

Number of peaks found: 0 Noise: 0.2

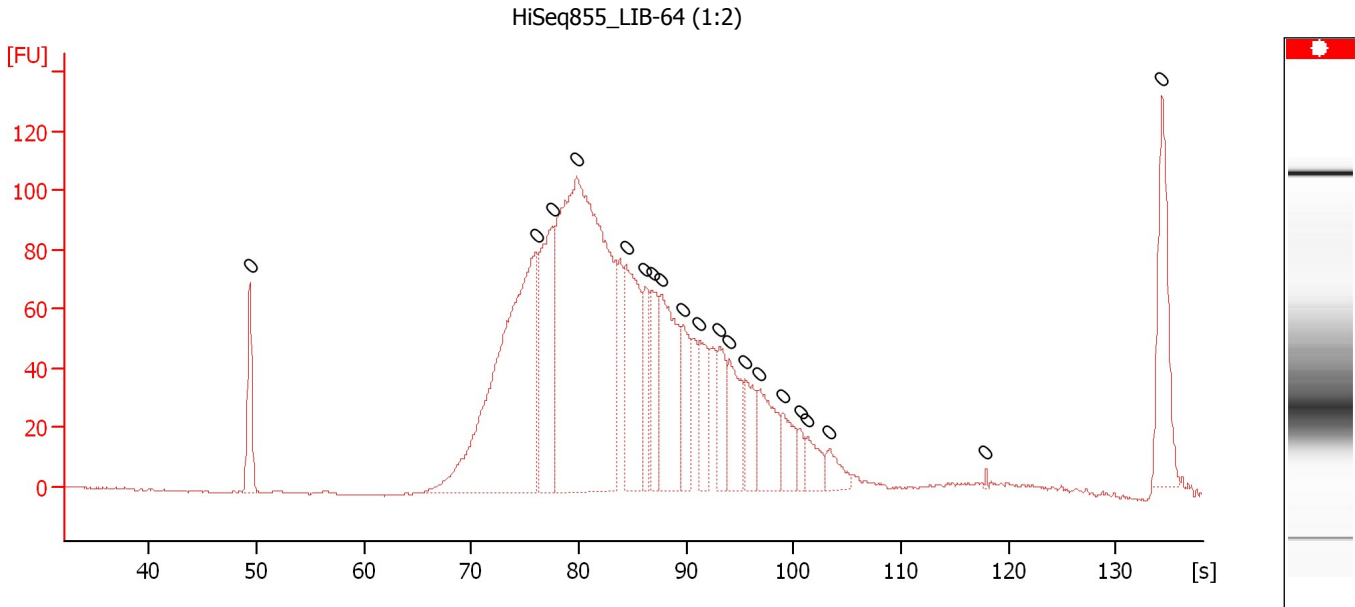
Peak table for sample 4 : HiSeq855 LIB-63 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.45
2	0	0.00	0.0		76.35
3	0	0.00	0.0		77.90
4	0	0.00	0.0		78.75
5	0	0.00	0.0		84.85
6	0	0.00	0.0		85.75
7	0	0.00	0.0		86.50
8	0	0.00	0.0		87.60
9	0	0.00	0.0		90.70
10	0	0.00	0.0		93.50
11	0	0.00	0.0		97.00
12	0	0.00	0.0		135.20

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : HiSeq855 LIB-64 (1:2)

Number of peaks found: 0 Noise: 0.2

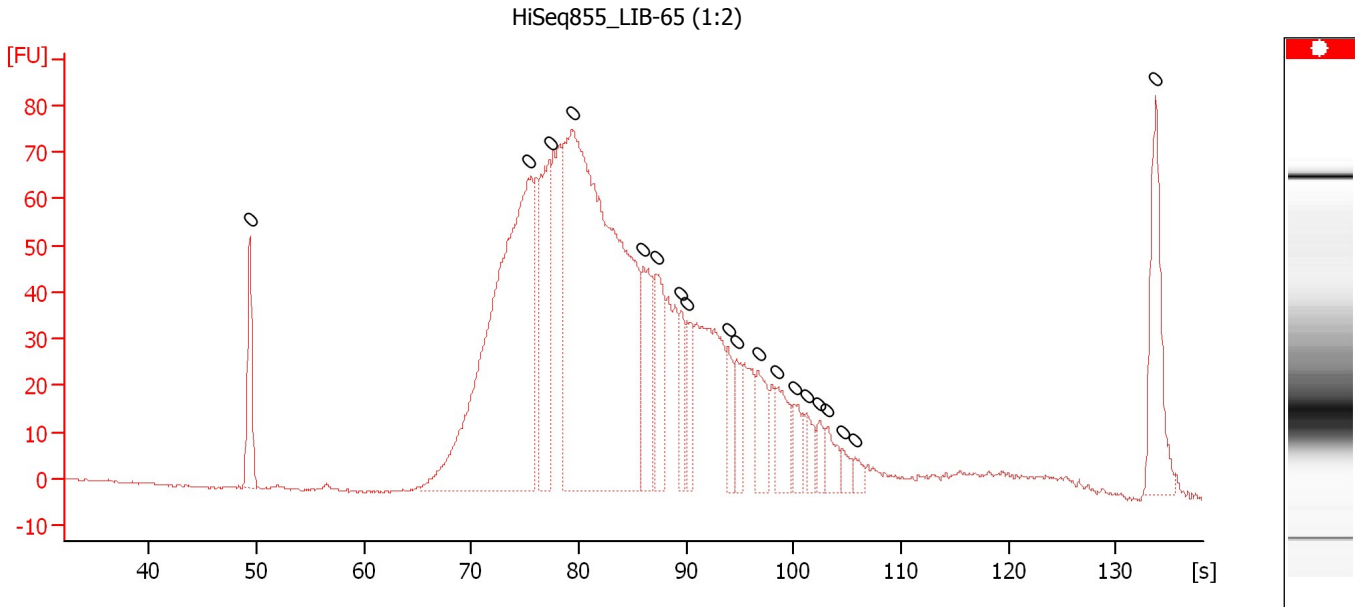
Peak table for sample 5 : HiSeq855 LIB-64 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.35
2	0	0.00	0.0		76.00
3	0	0.00	0.0		77.50
4	0	0.00	0.0		79.80
5	0	0.00	0.0		84.40
6	0	0.00	0.0		86.20
7	0	0.00	0.0		86.80
8	0	0.00	0.0		87.60
9	0	0.00	0.0		89.70
10	0	0.00	0.0		91.20
11	0	0.00	0.0		93.10
12	0	0.00	0.0		94.05
13	0	0.00	0.0		95.50
14	0	0.00	0.0		96.85
15	0	0.00	0.0		99.00
16	0	0.00	0.0		100.65
17	0	0.00	0.0		101.20
18	0	0.00	0.0		103.30
19	0	0.00	0.0		117.90
20	0	0.00	0.0		134.30

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HiSeq855 LIB-65 (1:2)

Number of peaks found: 0 Noise: 0.2

Peak table for sample 6 : HiSeq855 LIB-65 (1:2)

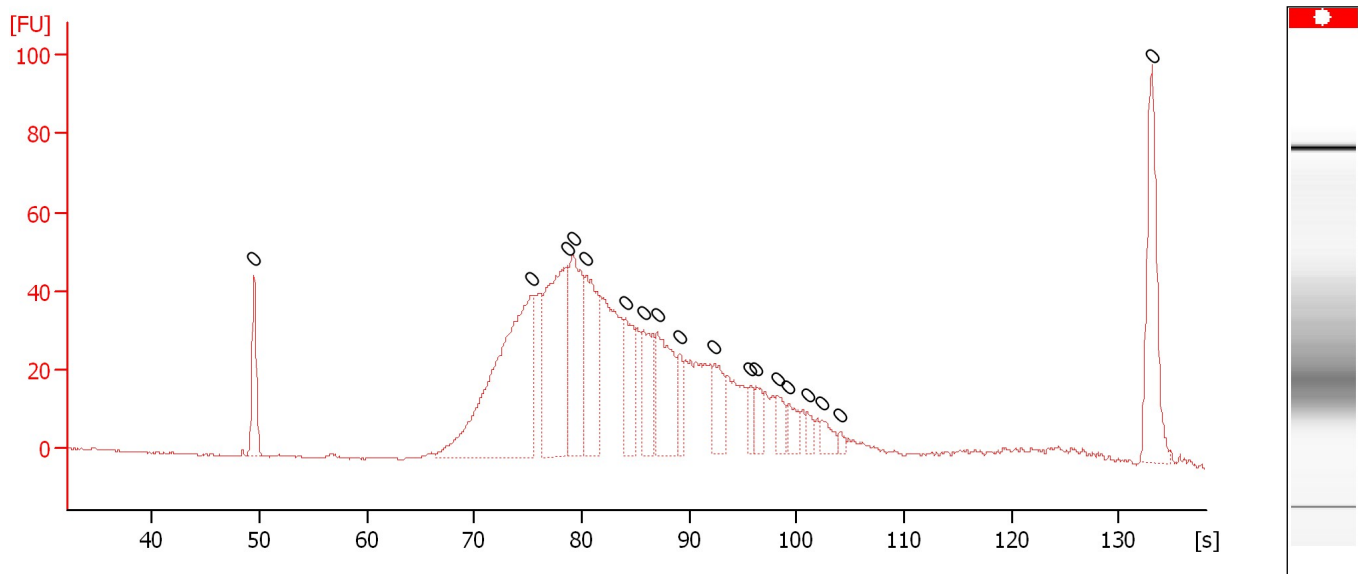
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.35
2	0	0.00	0.0		75.35
3	0	0.00	0.0		77.30
4	0	0.00	0.0		79.35
5	0	0.00	0.0		86.05
6	0	0.00	0.0		87.25
7	0	0.00	0.0		89.50
8	0	0.00	0.0		90.10
9	0	0.00	0.0		93.90
10	0	0.00	0.0		94.70
11	0	0.00	0.0		96.70
12	0	0.00	0.0		98.50
13	0	0.00	0.0		100.15
14	0	0.00	0.0		101.25
15	0	0.00	0.0		102.40
16	0	0.00	0.0		103.10
17	0	0.00	0.0		104.55
18	0	0.00	0.0		105.70
19	0	0.00	0.0		133.70

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...

HiSeq855_LIB-66 (1:2)



Overall Results for sample 7 : HiSeq855 LIB-66 (1:2)

Number of peaks found: 0 Noise: 0.2

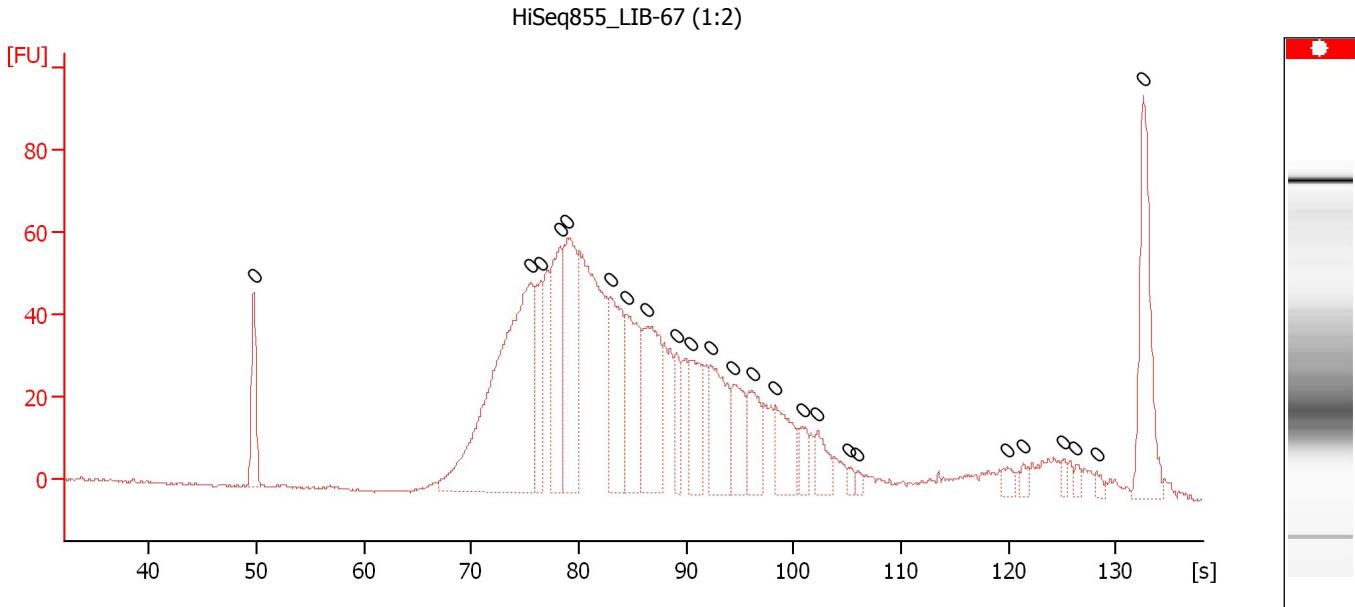
Peak table for sample 7 : HiSeq855 LIB-66 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.50
2	0	0.00	0.0		75.25
3	0	0.00	0.0		78.65
4	0	0.00	0.0		79.20
5	0	0.00	0.0		80.40
6	0	0.00	0.0		84.00
7	0	0.00	0.0		85.75
8	0	0.00	0.0		87.00
9	0	0.00	0.0		89.15
10	0	0.00	0.0		92.35
11	0	0.00	0.0		95.70
12	0	0.00	0.0		96.25
13	0	0.00	0.0		98.20
14	0	0.00	0.0		99.20
15	0	0.00	0.0		101.00
16	0	0.00	0.0		102.40
17	0	0.00	0.0		104.05
18	0	0.00	0.0		133.05

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : HiSeq855 LIB-67 (1:2)

Number of peaks found: 0 Noise: 0.2

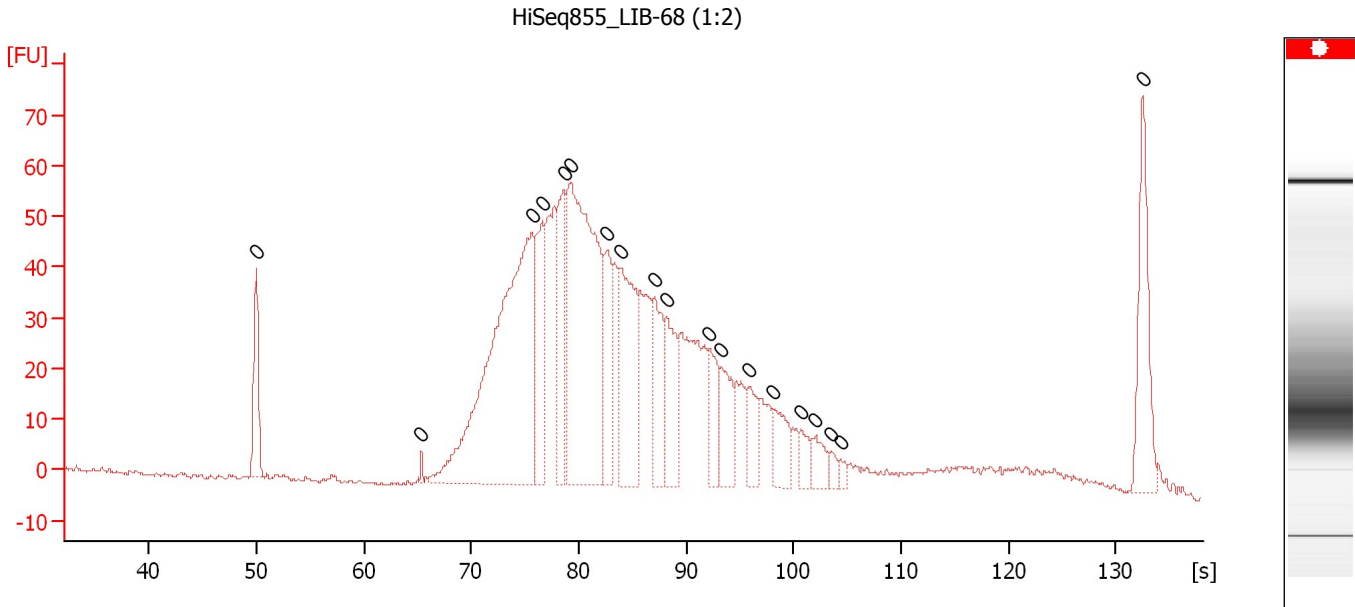
Peak table for sample 8 : HiSeq855 LIB-67 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.75
2	0	0.00	0.0		75.55
3	0	0.00	0.0		76.50
4	0	0.00	0.0		78.25
5	0	0.00	0.0		78.95
6	0	0.00	0.0		82.90
7	0	0.00	0.0		84.40
8	0	0.00	0.0		86.35
9	0	0.00	0.0		89.10
10	0	0.00	0.0		90.40
11	0	0.00	0.0		92.25
12	0	0.00	0.0		94.40
13	0	0.00	0.0		96.15
14	0	0.00	0.0		98.30
15	0	0.00	0.0		100.80
16	0	0.00	0.0		102.25
17	0	0.00	0.0		105.10
18	0	0.00	0.0		105.90
19	0	0.00	0.0		119.95
20	0	0.00	0.0		121.40
21	0	0.00	0.0		125.15
22	0	0.00	0.0		126.30
23	0	0.00	0.0		128.20
24	0	0.00	0.0		132.55

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : HiSeq855 LIB-68 (1:2)

Number of peaks found: 0 Noise: 0.5

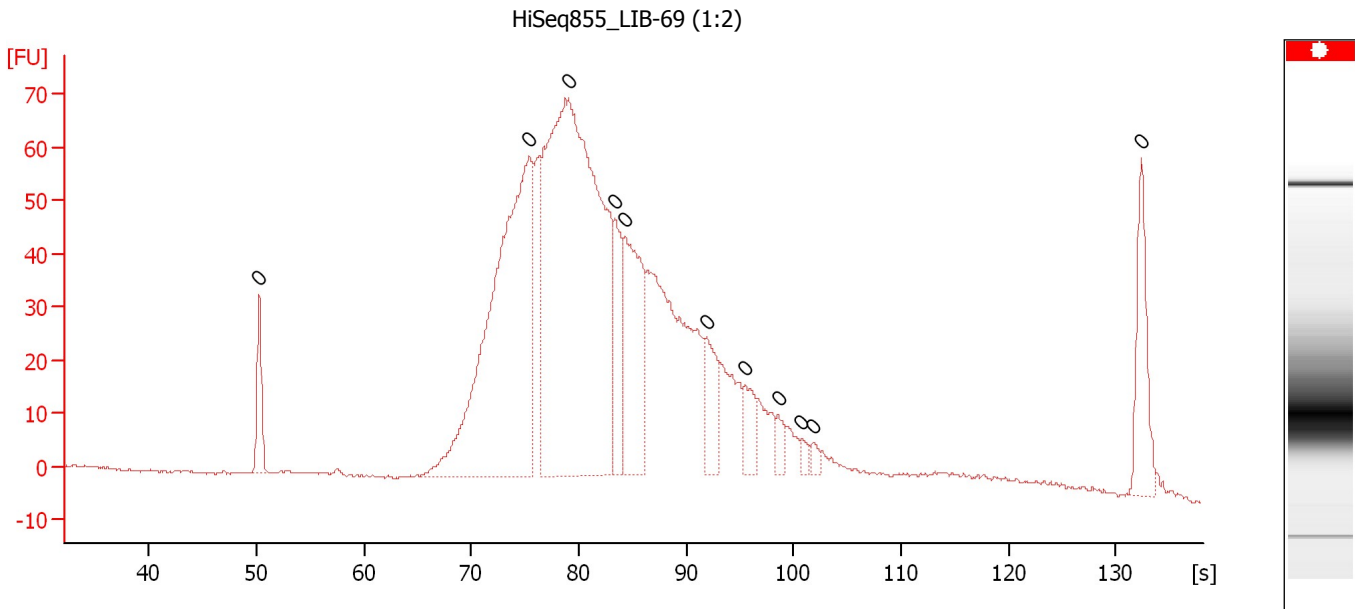
Peak table for sample 9 : HiSeq855 LIB-68 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		49.95
2	0	0.00	0.0		65.35
3	0	0.00	0.0		75.65
4	0	0.00	0.0		76.60
5	0	0.00	0.0		78.60
6	0	0.00	0.0		79.25
7	0	0.00	0.0		82.60
8	0	0.00	0.0		83.90
9	0	0.00	0.0		87.05
10	0	0.00	0.0		88.20
11	0	0.00	0.0		92.15
12	0	0.00	0.0		93.25
13	0	0.00	0.0		95.90
14	0	0.00	0.0		98.15
15	0	0.00	0.0		100.65
16	0	0.00	0.0		102.05
17	0	0.00	0.0		103.50
18	0	0.00	0.0		104.35
19	0	0.00	0.0		132.50

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : HiSeq855 LIB-69 (1:2)

Number of peaks found: 0 Noise: 0.2

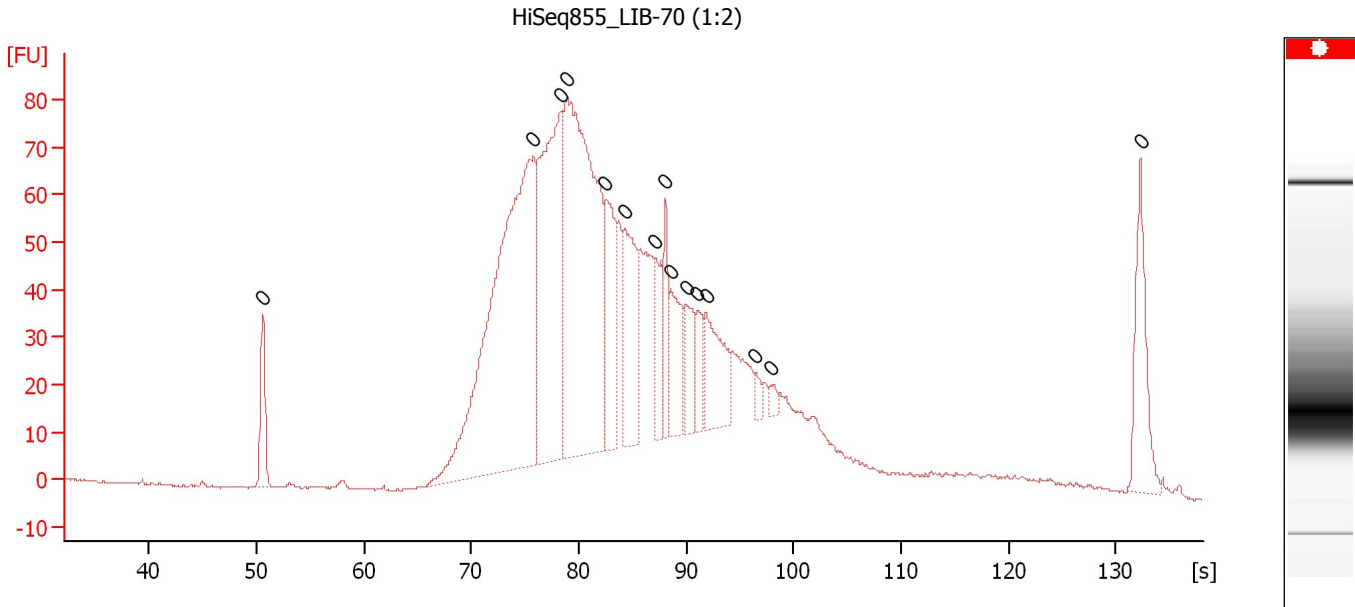
Peak table for sample 10 : HiSeq855 LIB-69 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		50.25
2	0	0.00	0.0		75.40
3	0	0.00	0.0		79.05
4	0	0.00	0.0		83.35
5	0	0.00	0.0		84.30
6	0	0.00	0.0		91.90
7	0	0.00	0.0		95.50
8	0	0.00	0.0		98.55
9	0	0.00	0.0		100.75
10	0	0.00	0.0		101.80
11	0	0.00	0.0		132.40

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : HiSeq855 LIB-70 (1:2)

Number of peaks found: 0 Noise: 0.2

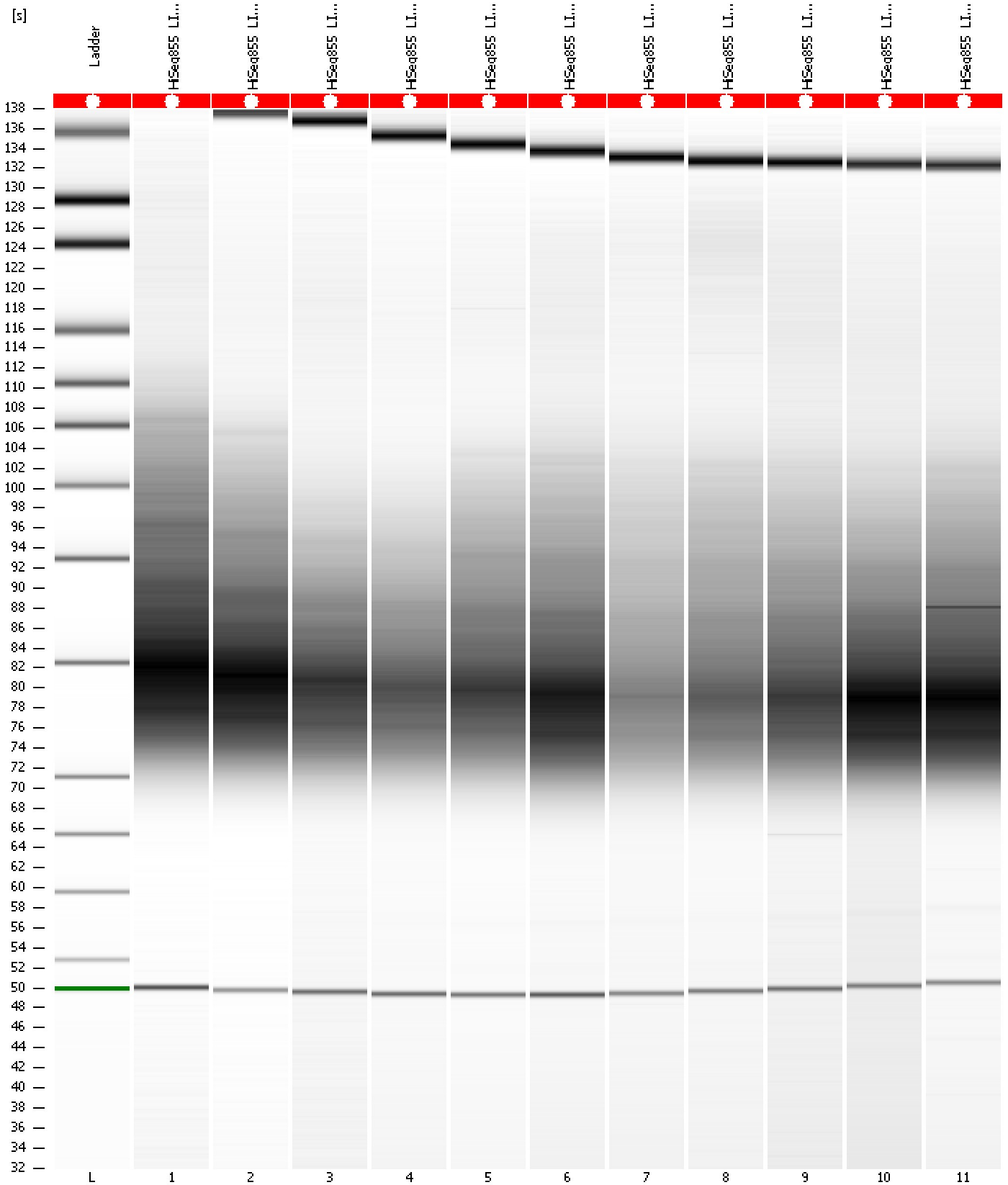
Peak table for sample 11 : HiSeq855 LIB-70 (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		50.60
2	0	0.00	0.0		75.75
3	0	0.00	0.0		78.40
4	0	0.00	0.0		78.90
5	0	0.00	0.0		82.45
6	0	0.00	0.0		84.25
7	0	0.00	0.0		87.15
8	0	0.00	0.0		88.10
9	0	0.00	0.0		88.55
10	0	0.00	0.0		90.05
11	0	0.00	0.0		91.05
12	0	0.00	0.0		91.85
13	0	0.00	0.0		96.45
14	0	0.00	0.0		97.90
15	0	0.00	0.0		132.30

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
Modified: 4/6/2017 10:59:19 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad

Created: 4/6/2017 10:17:59 AM
 Modified: 4/6/2017 10:59:19 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		4/6/2017 10:59:17 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2017-04-06\2017-04-06_001.xad)		Instrument	Run		4/6/2017 10:18:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/6/2017 10:18:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/6/2017 10:18:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/6/2017 10:18:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/6/2017 10:18:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/6/2017 10:18:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/6/2017 10:18:04 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1