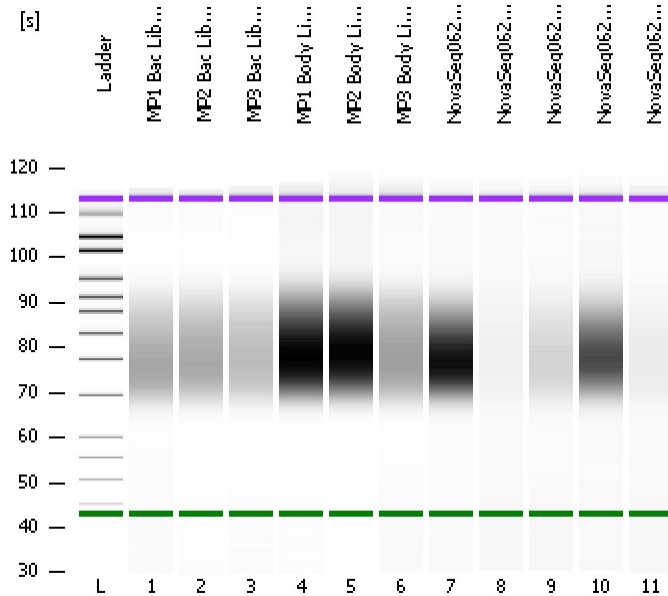


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
Modified: 9/19/2019 3:12:44 PM

Electrophoresis File Run Summary



Instrument Information:

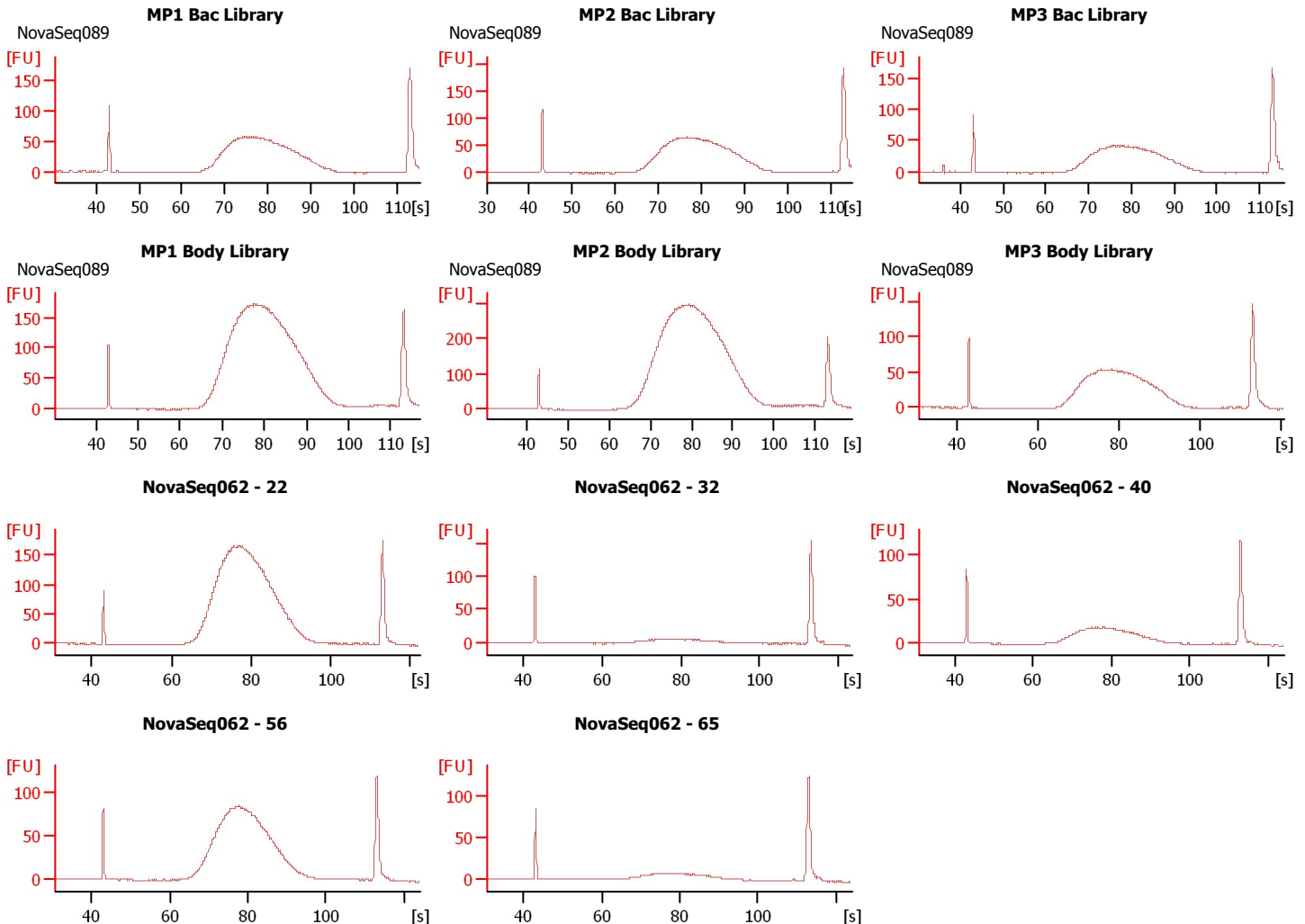
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
MP1 Bac Library	NovaSeq089	<input type="checkbox"/>	✓			
MP2 Bac Library	NovaSeq089	<input type="checkbox"/>	✓			
MP3 Bac Library	NovaSeq089	<input type="checkbox"/>	✓			
MP1 Body Library	NovaSeq089	<input type="checkbox"/>	✓			
MP2 Body Library	NovaSeq089	<input type="checkbox"/>	✓			
MP3 Body Library	NovaSeq089	<input type="checkbox"/>	✓			
NovaSeq062 - 22		<input type="checkbox"/>	✓			
NovaSeq062 - 32		<input type="checkbox"/>	✓			
NovaSeq062 - 40		<input type="checkbox"/>	✓			
NovaSeq062 - 56		<input type="checkbox"/>	✓			
NovaSeq062 - 65		<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\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
Modified: 9/19/2019 3:12:44 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

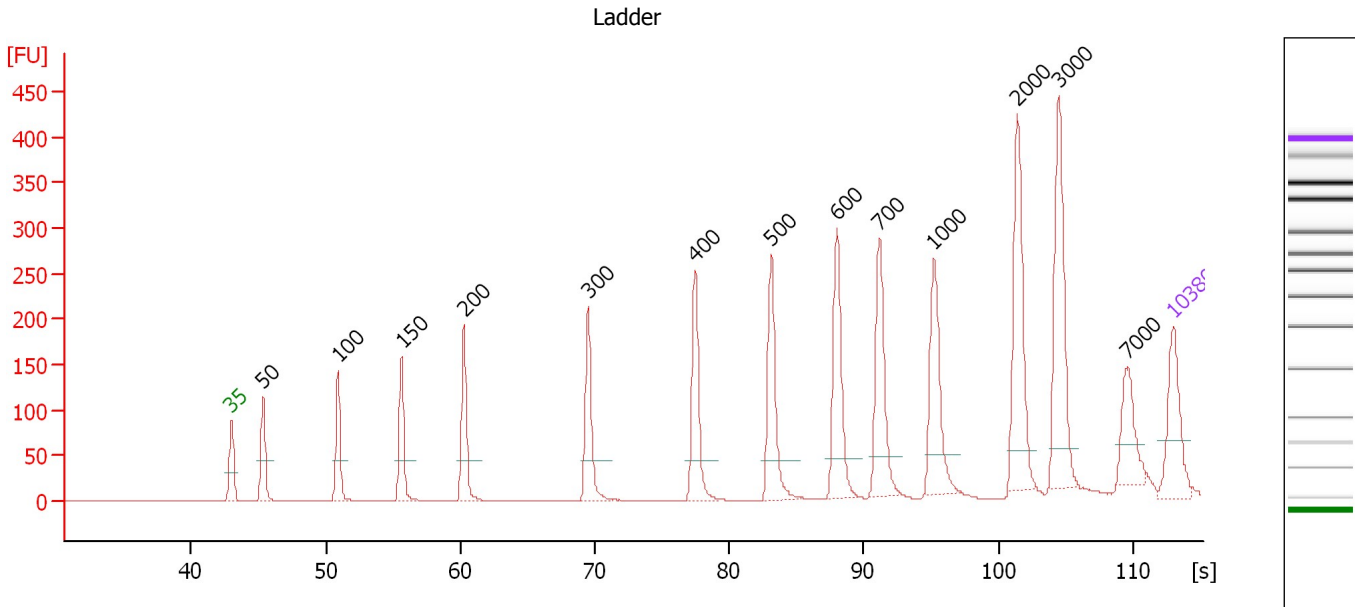
Ladder

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\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

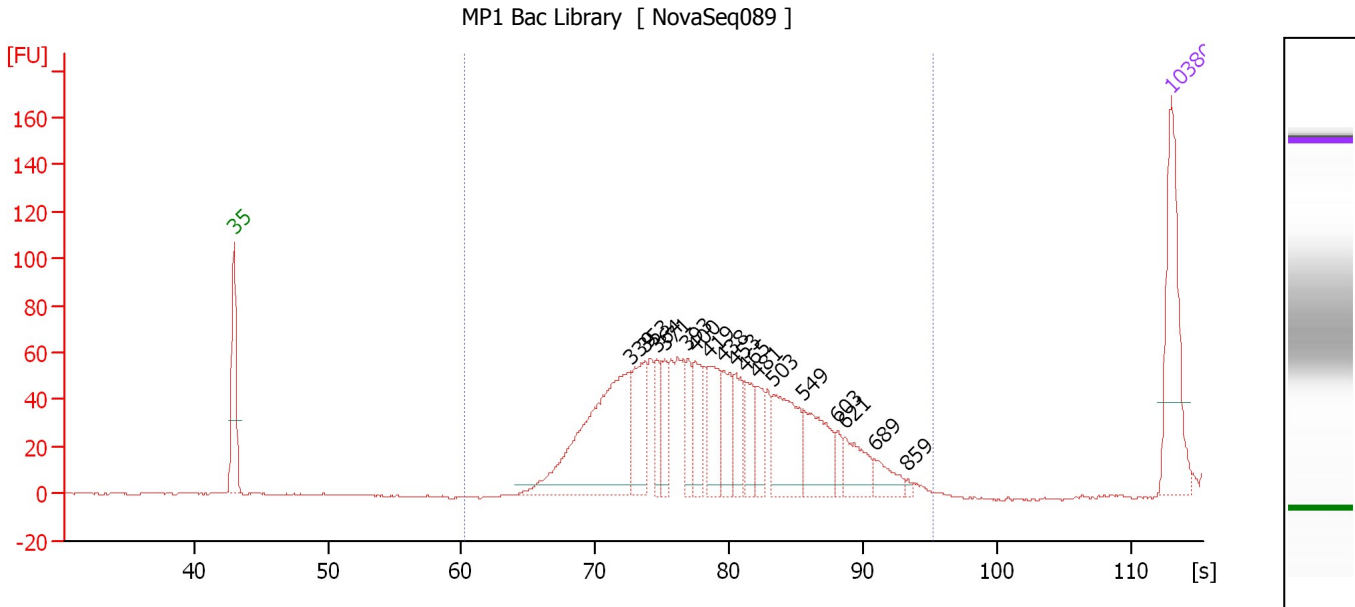
Peak table for Ladder

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	50.94
4	150	150.00	1,515.2	Ladder Peak	55.65
5	200	150.00	1,136.4	Ladder Peak	60.28
6	300	150.00	757.6	Ladder Peak	69.50
7	400	150.00	568.2	Ladder Peak	77.44
8	500	150.00	454.5	Ladder Peak	83.15
9	600	150.00	378.8	Ladder Peak	87.98
10	700	150.00	324.7	Ladder Peak	91.17
11	1,000	150.00	227.3	Ladder Peak	95.20
12	2,000	150.00	113.6	Ladder Peak	101.43
13	3,000	150.00	75.8	Ladder Peak	104.50
14	7,000	150.00	32.5	Ladder Peak	109.65
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : MP1 Bac Library

Number of peaks found: 17 Corr. Area 1: 1,238.6
 Noise: 0.3

Peak table for sample 1 : MP1 Bac Library

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	339	214.48	958.3		72.60
3	353	65.24	280.2		73.69
4	364	28.59	119.1		74.57
5	371	28.03	114.3		75.17
6	393	26.68	102.8		76.90
7	400	37.75	143.1		77.42
8	419	47.53	172.0		78.50
9	438	41.27	142.9		79.58
10	453	32.61	109.1		80.47
11	465	32.15	104.8		81.15
12	481	27.40	86.3		82.07
13	503	74.75	225.0		83.32
14	549	59.15	163.2		85.52
15	603	9.77	24.5		88.09
16	621	33.40	81.5		88.65
17	689	19.50	42.9		90.82
18	859	2.44	4.3		93.30
19	10,380	75.00	10.9	Upper Marker	113.00

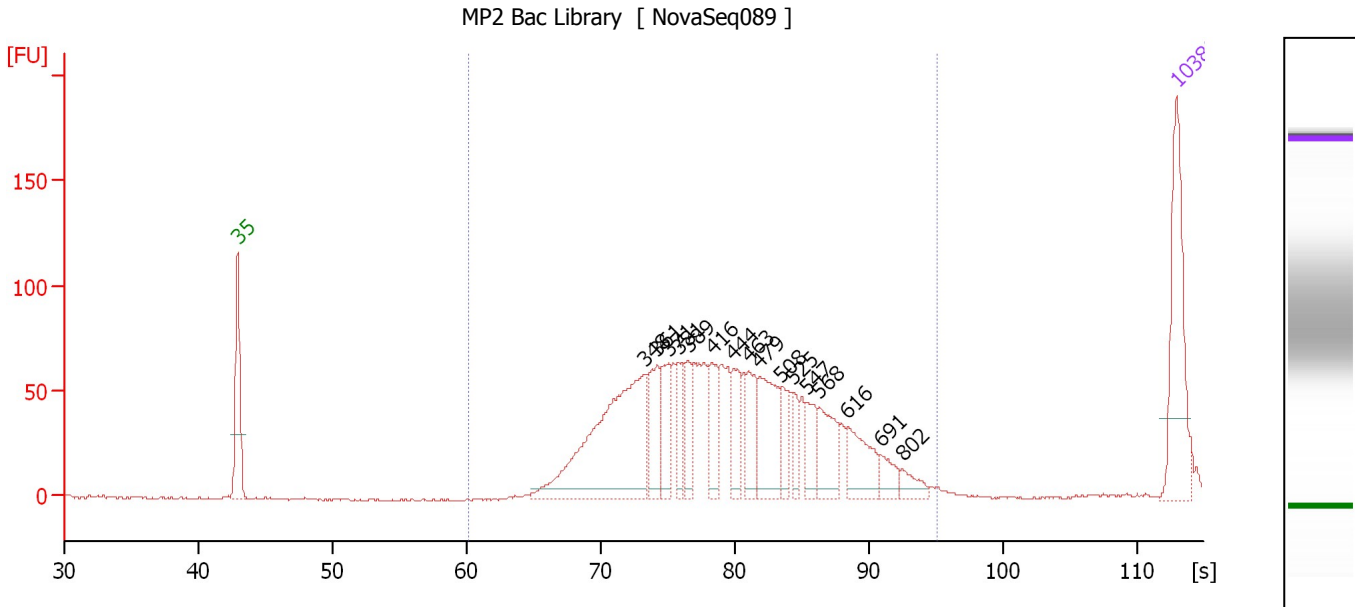
Region table for sample 1 : MP1 Bac Library

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	429	812.16	1,238.6	3,090.0	100	23.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : MP2 Bac Library

Number of peaks found: 16 Corr. Area 1: 1,290.1
 Noise: 0.5

Peak table for sample 2 : MP2 Bac Library

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	348	244.21	1,063.1		73.31
3	361	50.31	211.4		74.32
4	371	44.01	179.9		75.12
5	381	28.39	112.9		75.92
6	389	30.20	117.5		76.60
7	416	36.68	133.6		78.36
8	444	38.03	129.7		79.96
9	463	39.99	130.8		81.04
10	479	70.75	224.0		81.92
11	508	27.59	82.3		83.53
12	525	19.71	56.9		84.37
13	547	27.30	75.6		85.41
14	568	42.54	113.6		86.41
15	616	41.61	102.3		88.49
16	691	17.63	38.6		90.89
17	802	12.76	24.1		92.54
18	10,380	75.00	10.9	Upper Marker	113.00

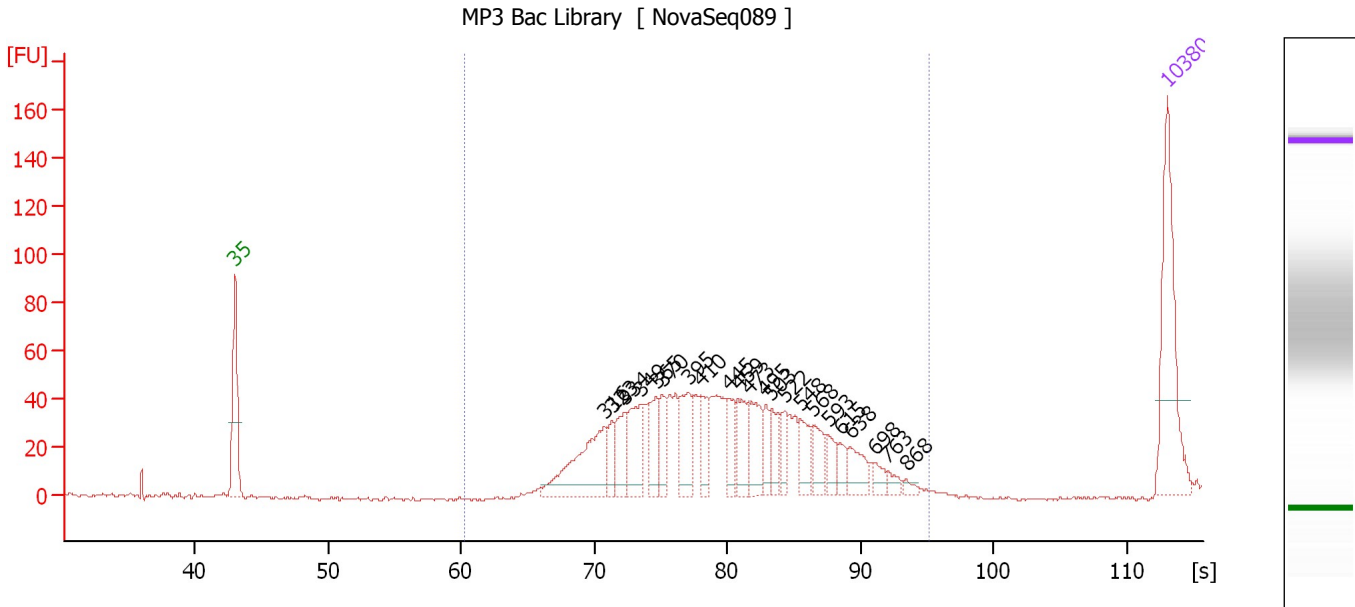
Region table for sample 2 : MP2 Bac Library

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	435	772.74	1,290.1	2,880.2	100	22.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : MP3 Bac Library

Number of peaks found: 22 Corr. Area 1: 916.9
 Noise: 0.6

Peak table for sample 3 : MP3 Bac Library

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	316	86.30	414.0		70.76
3	323	17.15	80.4		71.32
4	334	29.76	135.0		72.21
5	349	45.16	195.8		73.42
6	365	28.44	118.2		74.63
7	370	22.67	92.8		75.07
8	395	40.36	154.8		77.05
9	410	23.95	88.5		78.02
10	445	21.20	72.1		80.04
11	459	31.50	104.0		80.80
12	473	35.29	113.0		81.61
13	495	16.08	49.2		82.86
14	503	20.95	63.1		83.31
15	522	14.56	42.2		84.23
16	548	21.81	60.4		85.44
17	568	20.81	55.5		86.45
18	593	13.14	33.6		87.62
19	615	10.97	27.0		88.47
20	638	19.96	47.4		89.20
21	698	8.39	18.2		91.09
22	763	6.31	12.5		92.02
23	868	3.95	6.9		93.43
24	10,380	75.00	10.9	Upper Marker	113.00


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...

... Region table for sample 3 :

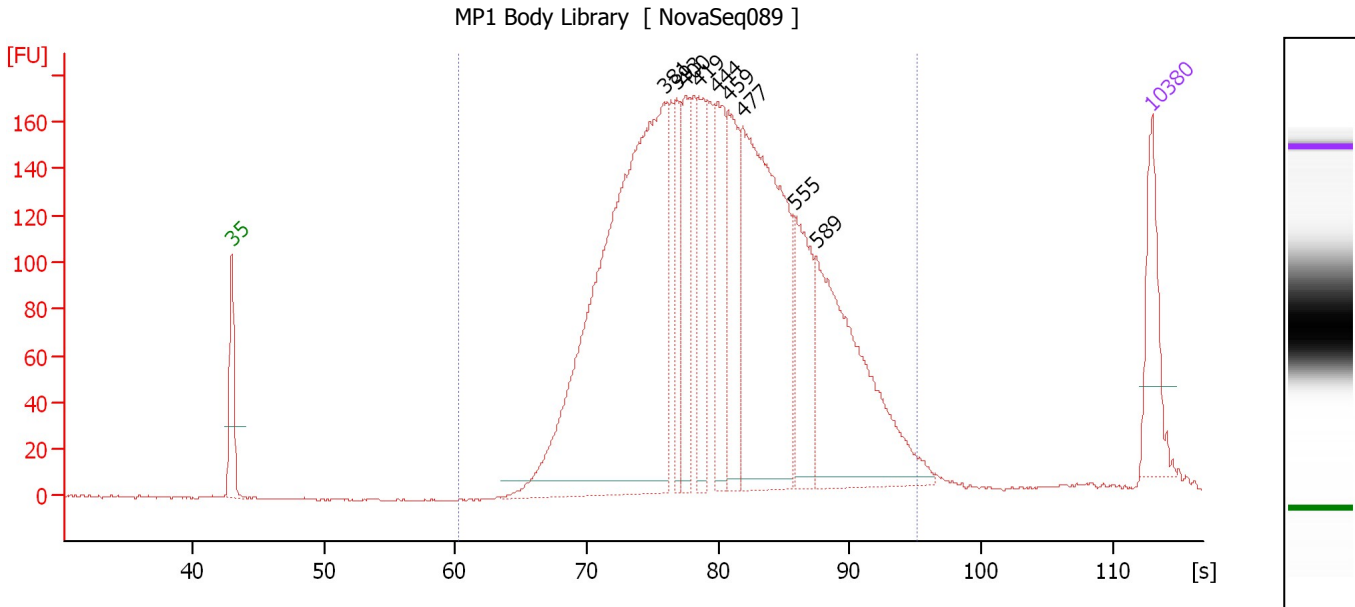
MP3 Bac Library

From [s]	To [s]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	442	616.91	916.9	2,280.2	 99	24.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : MP1 Body Library

Number of peaks found: 9 Corr. Area 1: 3,944.9
 Noise: 0.3

Peak table for sample 4 : MP1 Body Library

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	381	979.69	3,900.8		75.90
3	393	92.91	358.3		76.88
4	400	124.66	472.1		77.45
5	419	109.57	395.8		78.55
6	444	136.29	465.3		79.94
7	459	147.53	487.2		80.80
8	477	489.37	1,552.9		81.86
9	555	132.15	360.5		85.83
10	589	329.53	847.3		87.46
11	10,380	75.00	10.9	Upper Marker	113.00

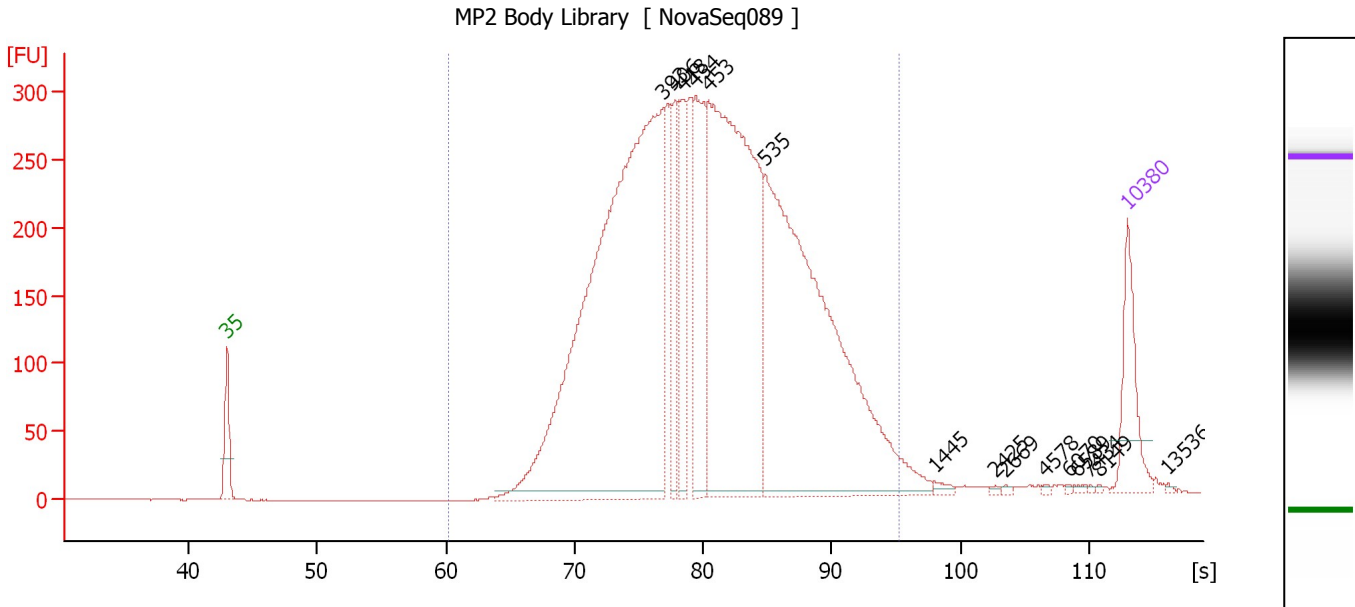
Region table for sample 4 : MP1 Body Library

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
60.28	95.20	459	2,780.90	3,944.9	10,011.4	100	26.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : MP2 Body Library

Number of peaks found: 15 Corr. Area 1: 6,937.3
 Noise: 0.3

Peak table for sample 5 : MP2 Body Library

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	393	1,302.60	5,020.6		76.89
3	406	112.23	418.3		77.81
4	418	146.13	529.4		78.48
5	434	203.12	708.6		79.40
6	453	823.02	2,755.3		80.44
7	535	887.13	2,513.7		84.82
8	1,445	6.00	6.3		97.97
9	2,425	2.17	1.4		102.73
10	2,669	1.99	1.1		103.48
11	4,578	1.77	0.6		106.53
12	6,070	1.55	0.4		108.45
13	6,589	2.61	0.6		109.12
14	7,434	1.14	0.2		110.08
15	8,149	1.20	0.2		110.79
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,536	0.00	0.0		116.13

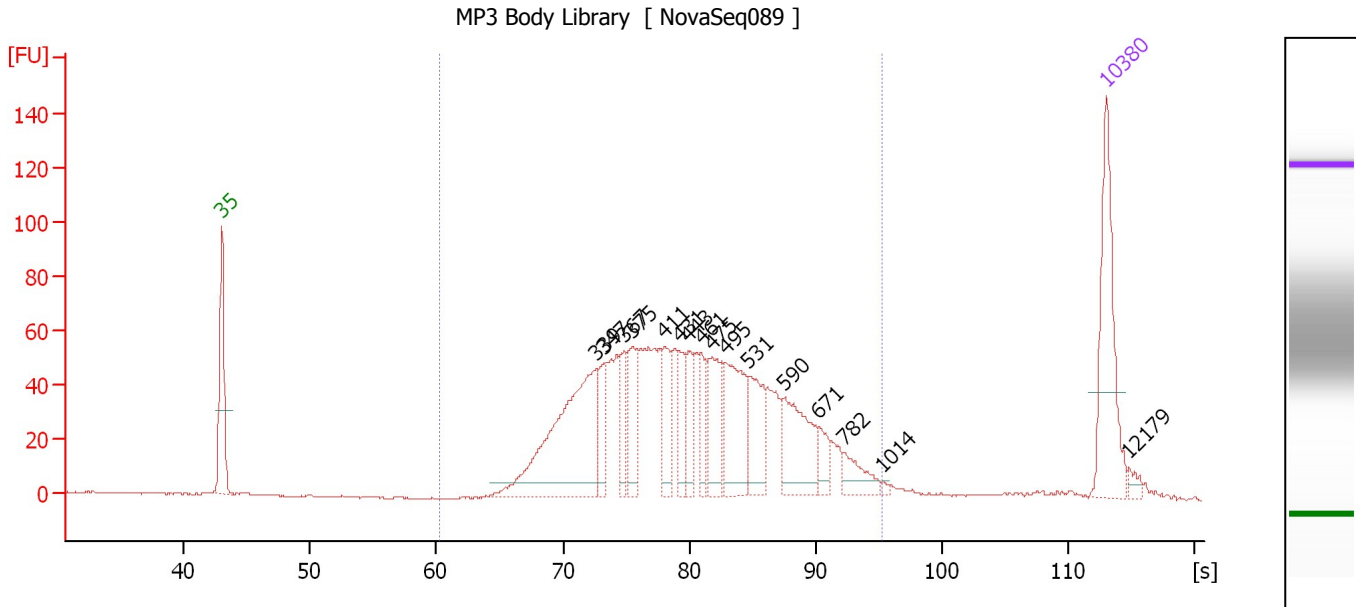
Region table for sample 5 : MP2 Body Library

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
60.28	95.20	467	3,672.22	6,937.3	13,036.0	98	27.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : MP3 Body Library

Number of peaks found: 16 Corr. Area 1: 1,386.2
 Noise: 0.2

Peak table for sample 6 : MP3 Body Library

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	339	201.46	900.1		72.61
3	347	30.72	134.3		73.20
4	367	29.66	122.5		74.81
5	375	43.79	176.7		75.49
6	411	36.69	135.4		78.04
7	431	26.97	94.9		79.19
8	443	28.65	97.9		79.91
9	461	25.64	84.2		80.93
10	475	54.73	174.5		81.74
11	495	74.37	227.5		82.88
12	531	48.94	139.5		84.67
13	590	65.90	169.1		87.51
14	671	16.78	37.9		90.23
15	782	21.39	41.4		92.27
16	1,014	1.58	2.4		95.29
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,179	0.00	0.0		114.78

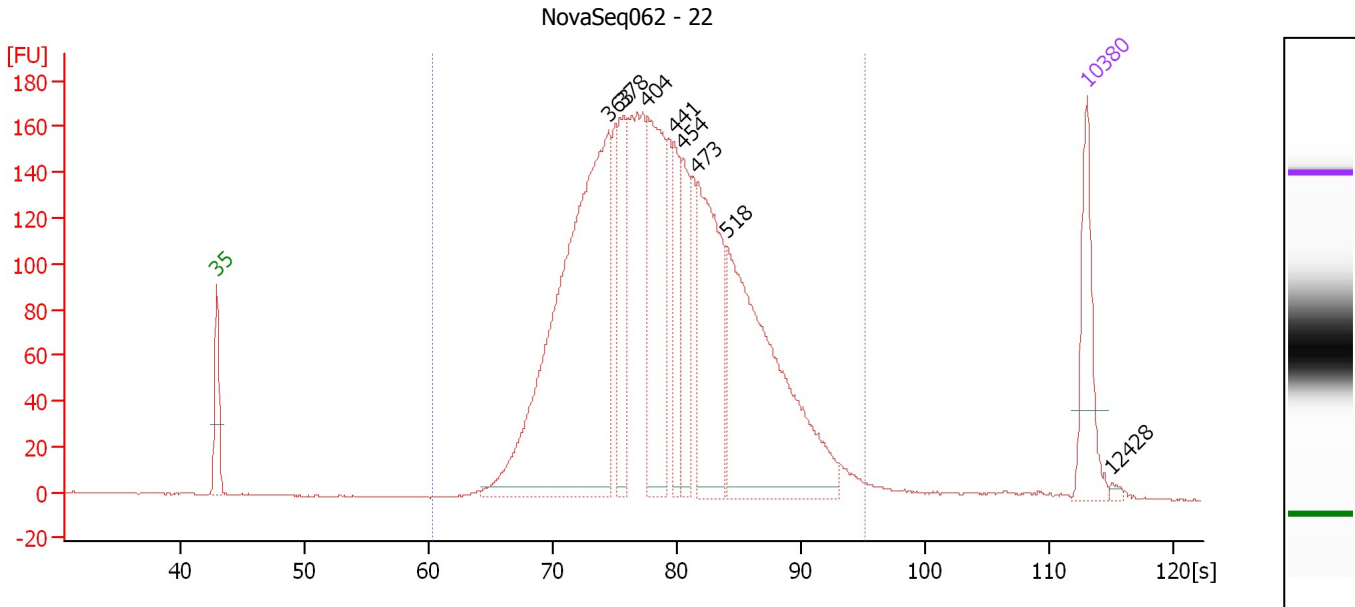
Region table for sample 6 : MP3 Body Library

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	460	976.51	1,386.2	3,547.5	97	28.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NovaSeq062 - 22

Number of peaks found: 8 Corr. Area 1: 3,553.9
 Noise: 0.3

Peak table for sample 7 : NovaSeq062 - 22

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	363	736.21	3,073.2		74.50
3	378	125.86	504.9		75.67
4	404	221.22	830.2		77.65
5	441	89.78	308.6		79.77
6	454	89.80	299.9		80.51
7	473	238.69	764.0		81.63
8	518	415.64	1,216.3		84.01
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,428	0.00	0.0		115.03

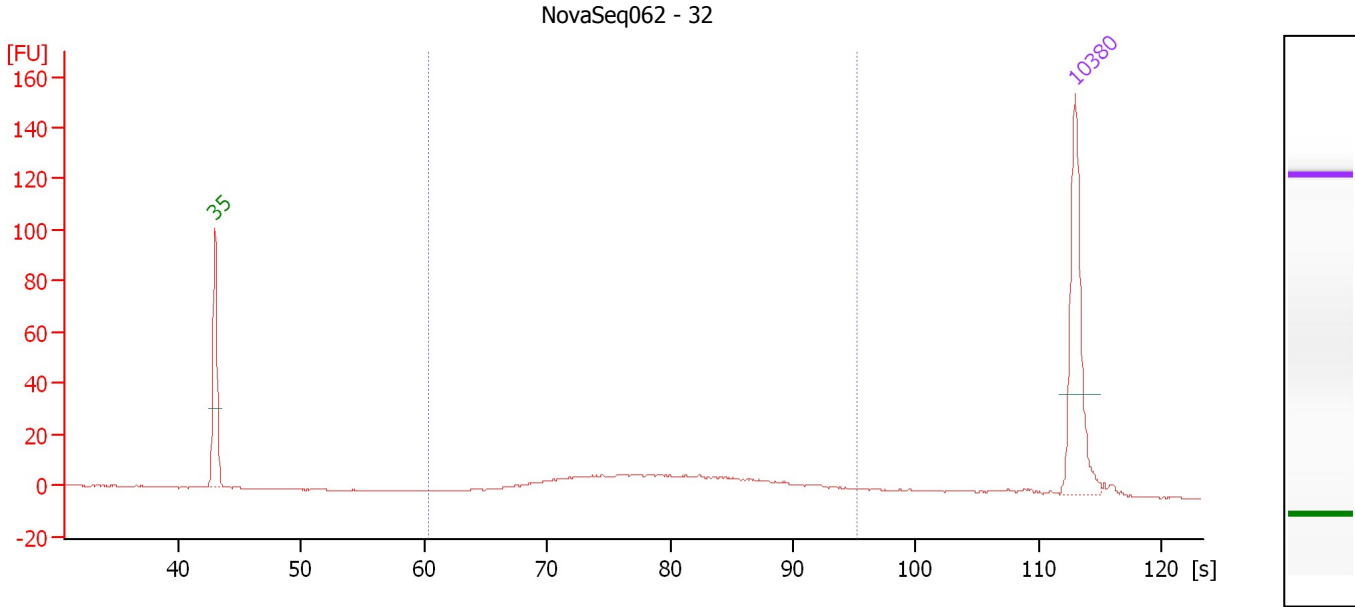
Region table for sample 7 : NovaSeq062 - 22

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	437	2,376.37	3,553.9	8,880.6	99	25.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NovaSeq062 - 32

Number of peaks found: 0 Corr. Area 1: 185.1
 Noise: 0.2

Peak table for sample 8 : NovaSeq062 - 32

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

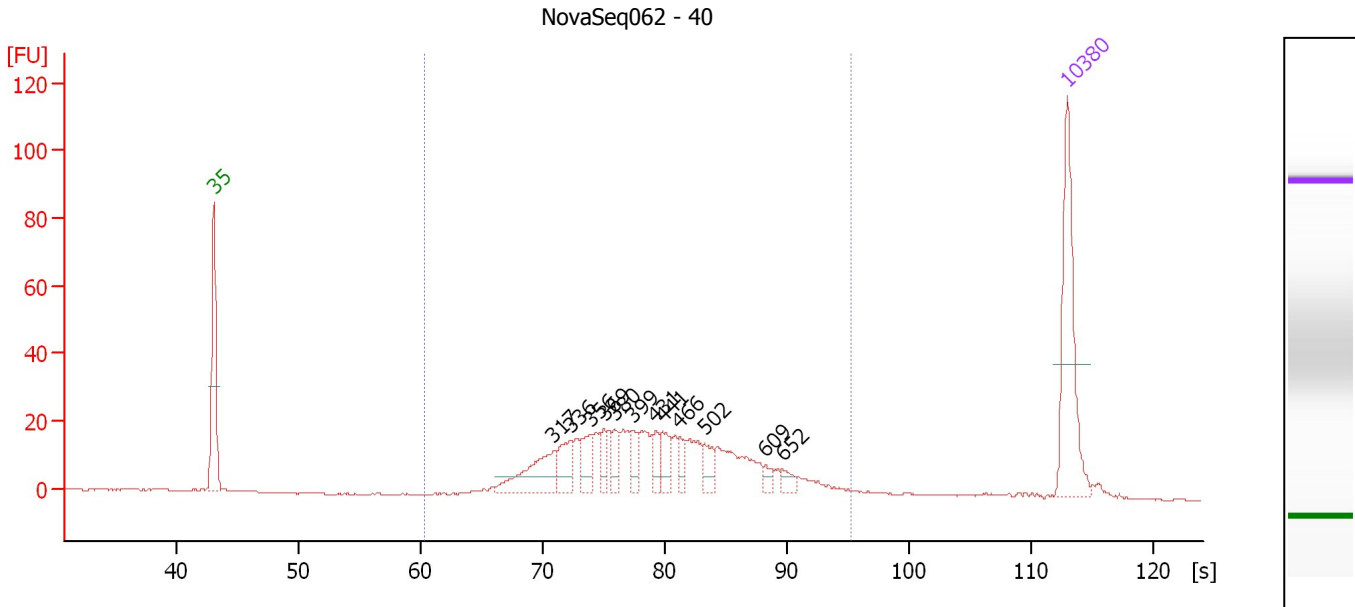
Region table for sample 8 : NovaSeq062 - 32

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	481	137.59	185.1	490.2	80	31.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NovaSeq062 - 40

Number of peaks found: 12 Corr. Area 1: 457.5
 Noise: 0.2

Peak table for sample 9 : NovaSeq062 - 40

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	317	54.86	262.0		70.87
3	336	27.24	123.0		72.32
4	356	22.94	97.6		73.95
5	369	14.43	59.2		75.01
6	380	15.24	60.8		75.84
7	399	14.45	54.9		77.34
8	431	14.66	51.5		79.23
9	441	19.93	68.4		79.81
10	466	11.15	36.2		81.21
11	502	15.75	47.6		83.24
12	609	5.81	14.5		88.26
13	652	7.30	17.0		89.62
14	10,380	75.00	10.9	Upper Marker	113.00

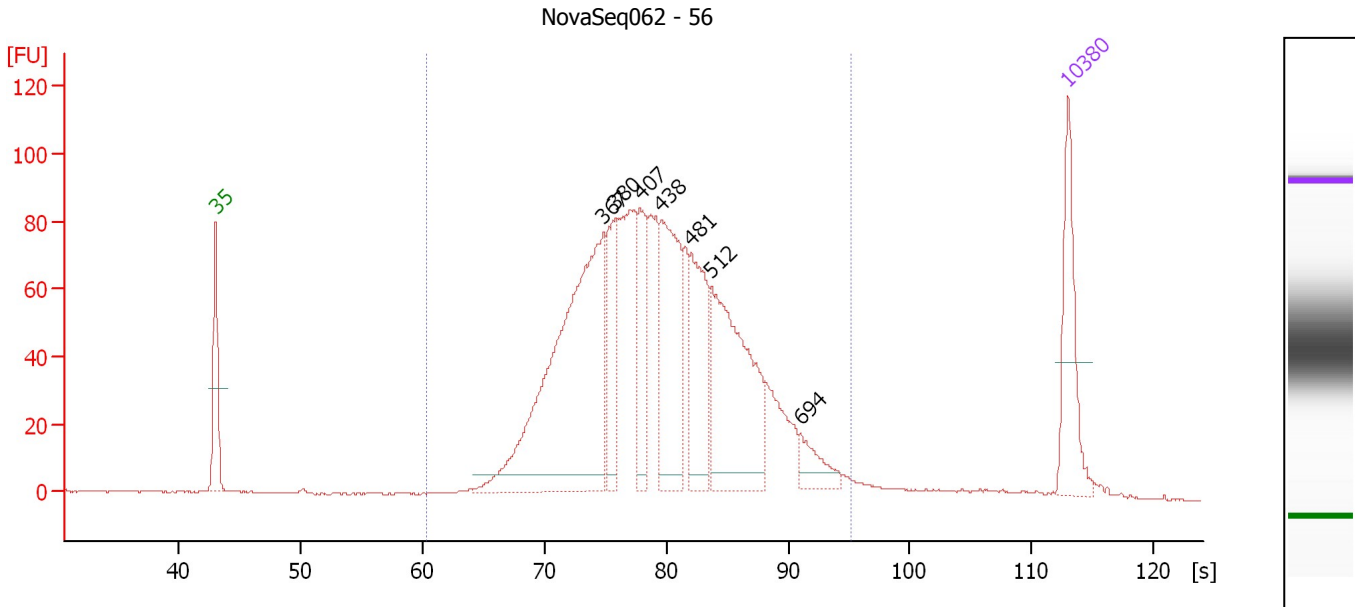
Region table for sample 9 : NovaSeq062 - 40

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	450	449.75	457.5	1,666.8	93	28.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NovaSeq062 - 56

Number of peaks found: 7 Corr. Area 1: 1,812.8
 Noise: 0.2

Peak table for sample 10 : NovaSeq062 - 56

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	367	487.91	2,012.5		74.85
3	380	81.99	327.3		75.82
4	407	86.17	320.7		77.85
5	438	176.70	611.3		79.61
6	481	126.01	397.3		82.04
7	512	235.87	698.5		83.71
8	694	34.02	74.2		90.99
9	10,380	75.00	10.9	Upper Marker	113.00

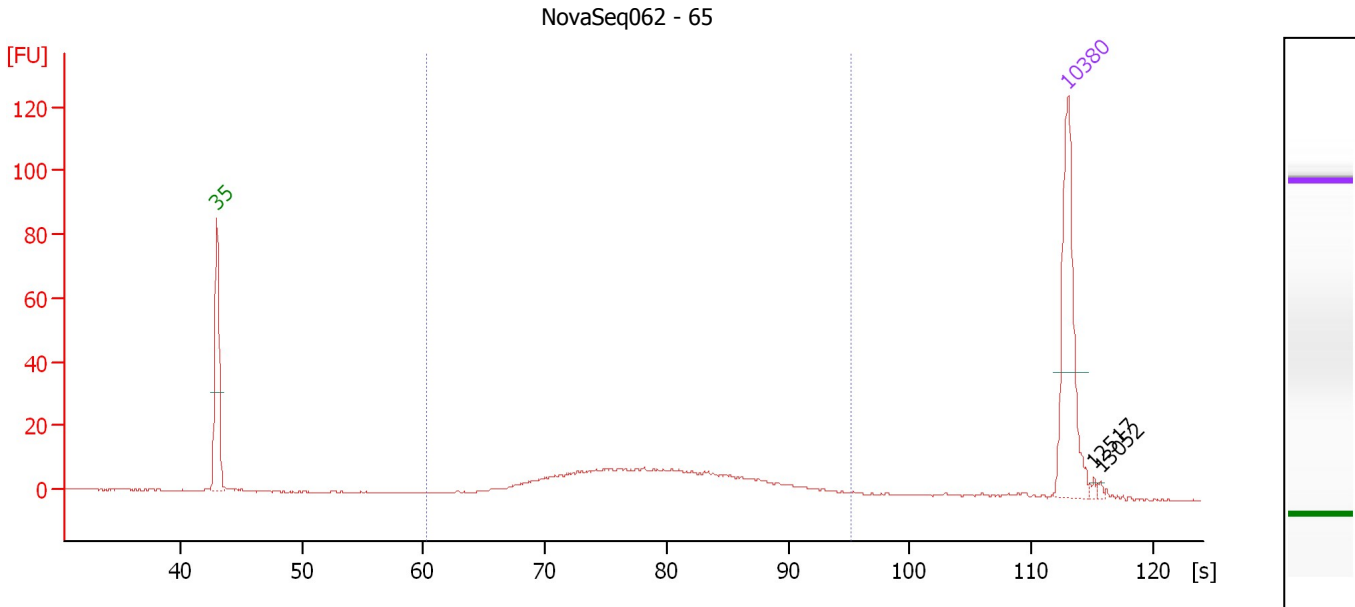
Region table for sample 10 : NovaSeq062 - 56

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	447	1,728.24	1,812.8	6,359.9	96	26.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NovaSeq062 - 65

Number of peaks found: 2 Corr. Area 1: 207.6
 Noise: 0.2

Peak table for sample 11 : NovaSeq062 - 65

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
3	12,517	0.00	0.0		115.12
4	13,052	0.00	0.0		115.65

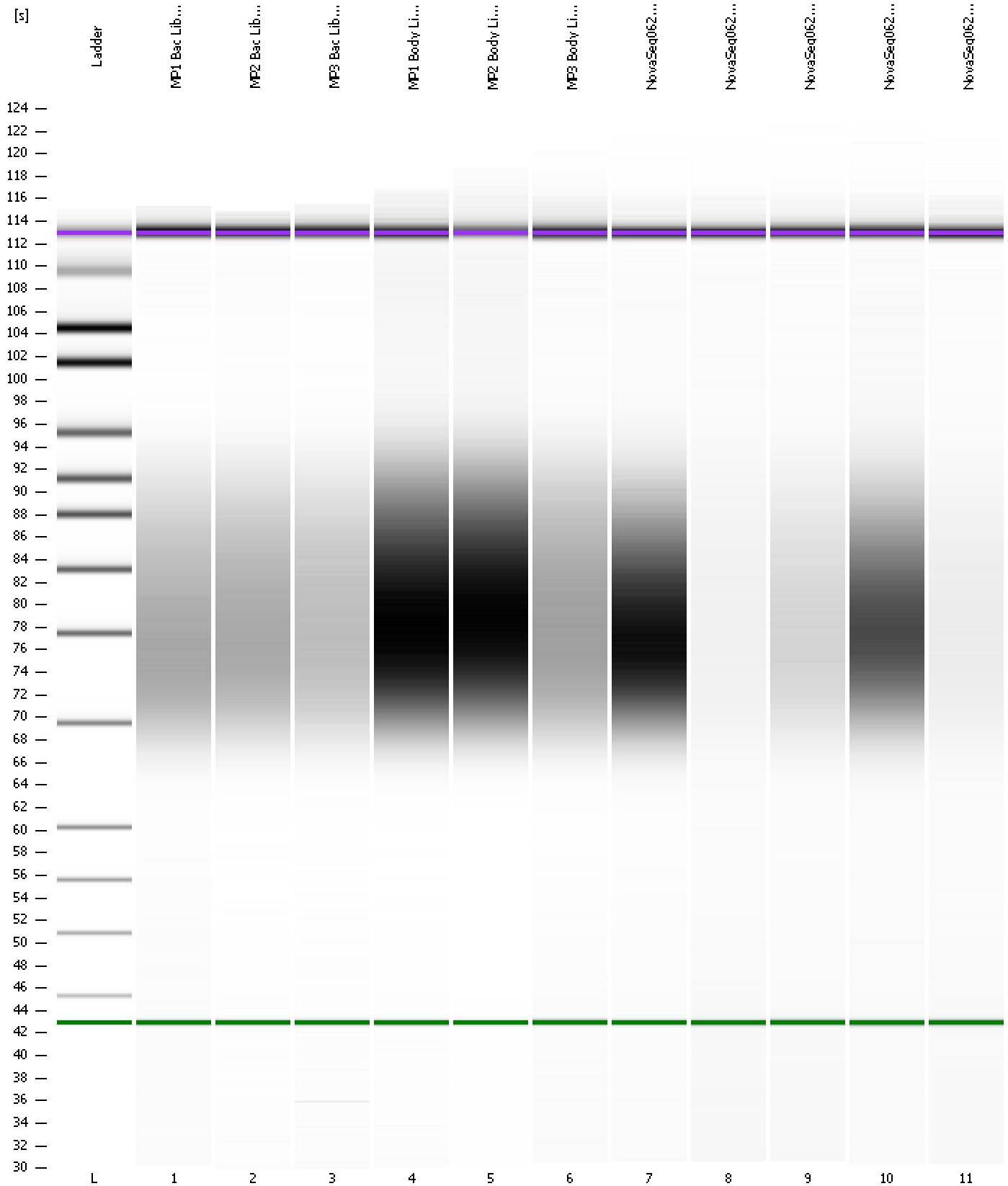
Region table for sample 11 : NovaSeq062 - 65

From [s]	To [s]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
60.28	95.20	457	182.16	207.6	675.3	88	29.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
Modified: 9/19/2019 3:12:44 PM

Gel Image

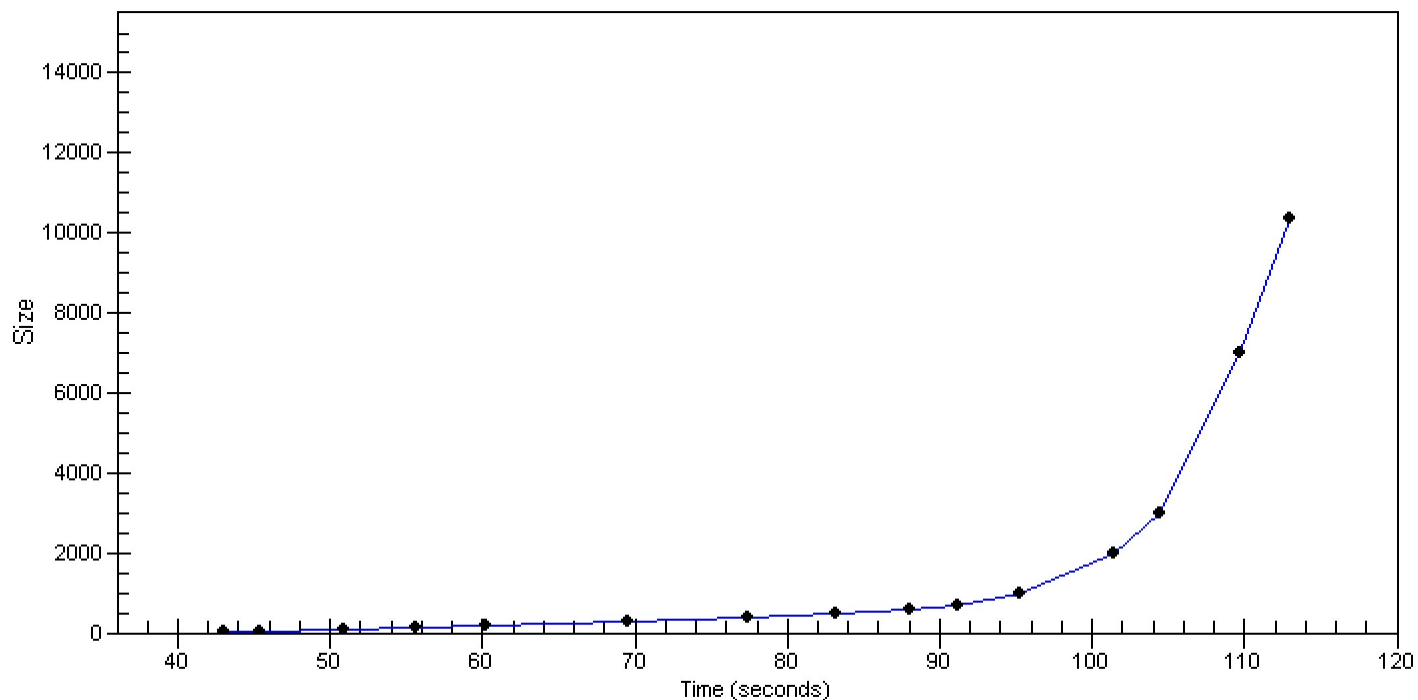


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
Modified: 9/19/2019 3:12:44 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-19\2019-09-19_002.xad

Created: 9/19/2019 1:47:30 PM
 Modified: 9/19/2019 3:12:44 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		9/19/2019 2:28:41 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\2019-09-19\2019-09-19_002.xad)		Instrument	Run		9/19/2019 1:47:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		9/19/2019 1:47:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/19/2019 1:47:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/19/2019 1:47:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		9/19/2019 1:47:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/19/2019 1:47:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/19/2019 1:47:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1