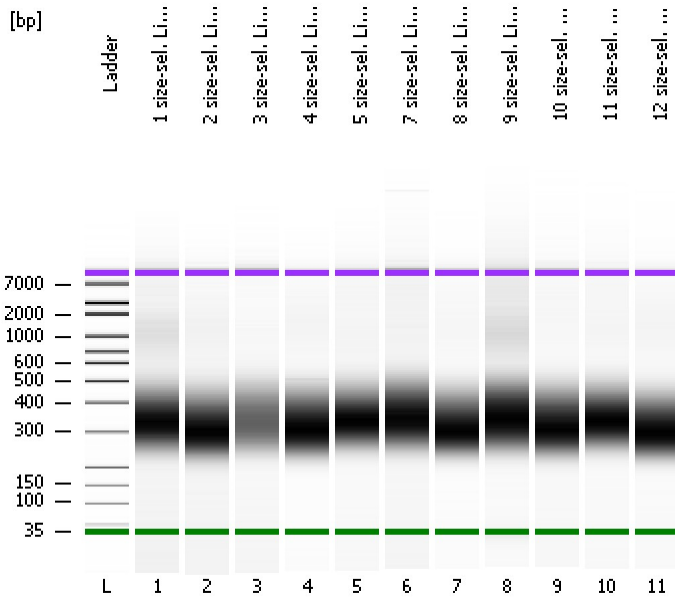


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
Modified: 10/10/2019 8:31:02 AM

**Electrophoresis File Run Summary**



Instrument Information:

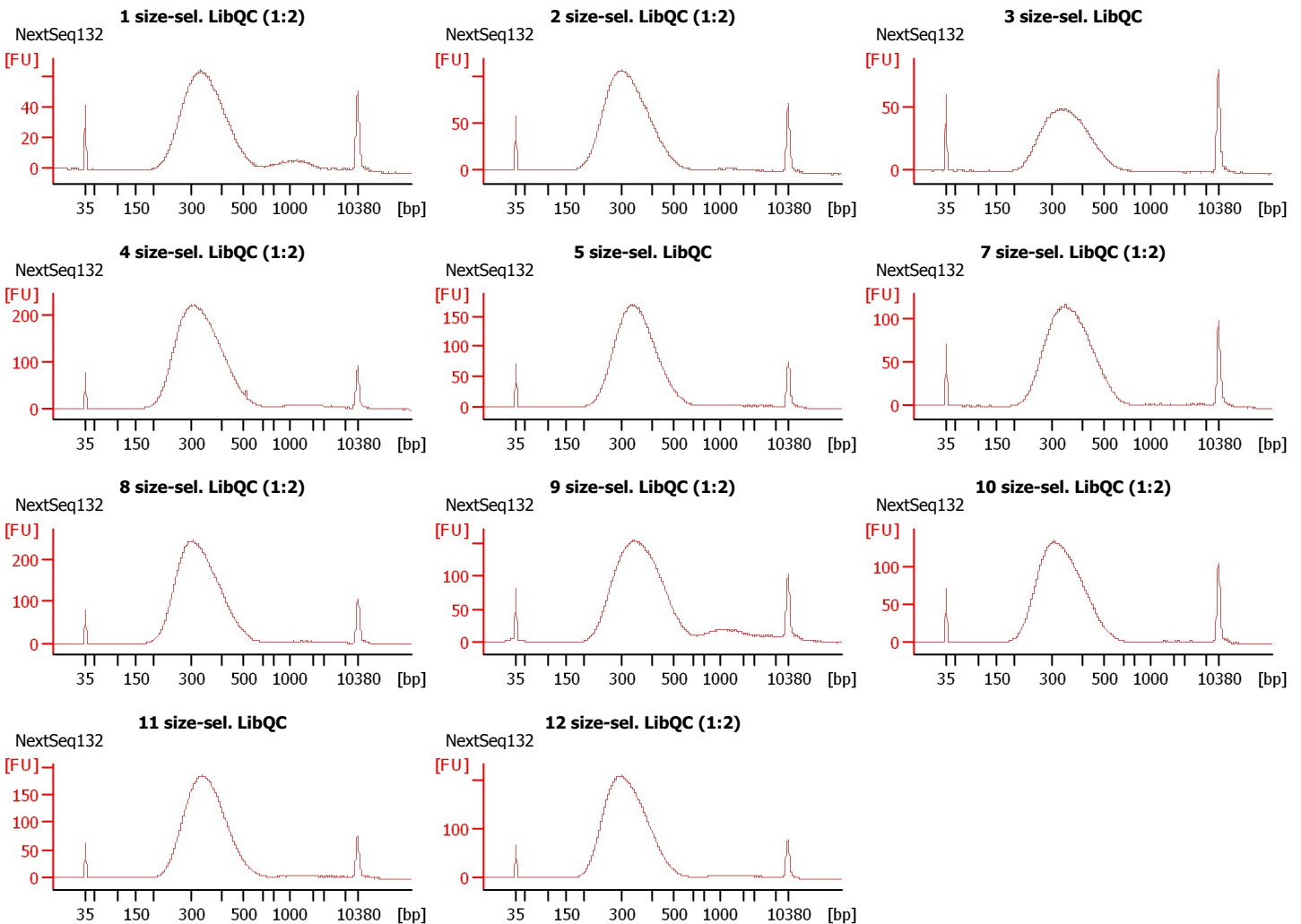
Instrument Name: DE34903152 Firmware: C.01.069  
Serial#: DE34903152 Type: G2938C

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\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1 size-sel. LibQC (1:2)	NextSeq132	<input type="checkbox"/>	✓			
2 size-sel. LibQC (1:2)	NextSeq132	<input type="checkbox"/>	✓			
3 size-sel. LibQC	NextSeq132	<input type="checkbox"/>	✓			
4 size-sel. LibQC (1:2)	NextSeq132	<input type="checkbox"/>	✓			
5 size-sel. LibQC	NextSeq132	<input type="checkbox"/>	✓			
7 size-sel. LibQC (1:2)	NextSeq132	<input type="checkbox"/>	✓			
8 size-sel. LibQC (1:2)	NextSeq132	<input type="checkbox"/>	✓			
9 size-sel. LibQC (1:2)	NextSeq132	<input type="checkbox"/>	✓			
10 size-sel. LibQC (1:2)	NextSeq132	<input type="checkbox"/>	✓			
11 size-sel. LibQC	NextSeq132	<input type="checkbox"/>	✓			
12 size-sel. LibQC (1:2)	NextSeq132	<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\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
Modified: 10/10/2019 8:31:02 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

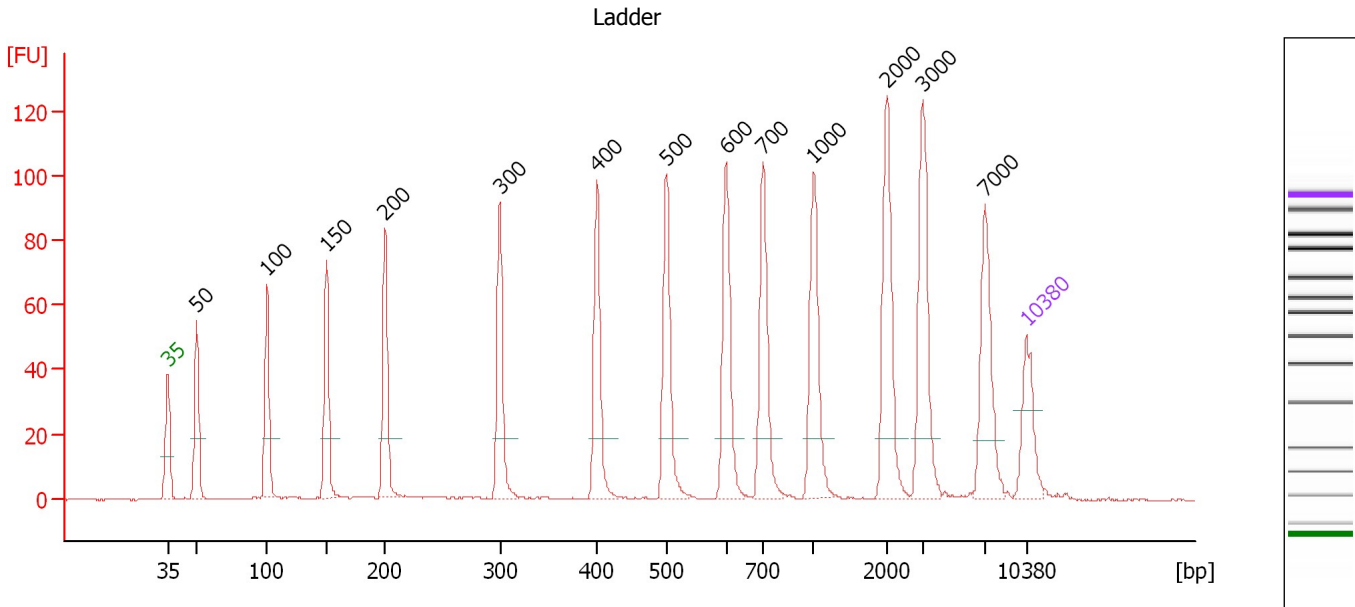
**Ladder**

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\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

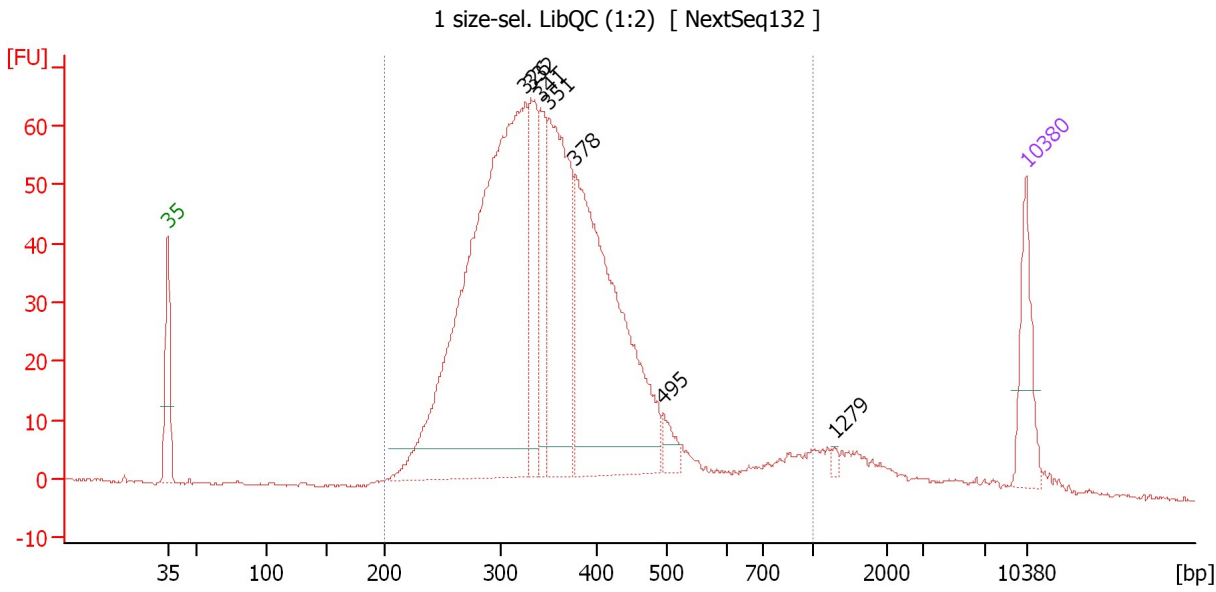
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.37
3	100	150.00	2,272.7	Ladder Peak	51.11
4	150	150.00	1,515.2	Ladder Peak	55.94
5	200	150.00	1,136.4	Ladder Peak	60.73
6	300	150.00	757.6	Ladder Peak	70.07
7	400	150.00	568.2	Ladder Peak	78.00
8	500	150.00	454.5	Ladder Peak	83.70
9	600	150.00	378.8	Ladder Peak	88.53
10	700	150.00	324.7	Ladder Peak	91.54
11	1,000	150.00	227.3	Ladder Peak	95.68
12	2,000	150.00	113.6	Ladder Peak	101.65
13	3,000	150.00	75.8	Ladder Peak	104.57
14	7,000	150.00	32.5	Ladder Peak	109.67
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 1 size-sel. LibQC (1:2)**

Number of peaks found: 7                      Corr. Area 1: 1,279.8  
 Noise: 0.2

**Peak table for sample 1 : 1 size-sel. LibQC (1:2)**

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	326	1,175.75	5,458.8		72.16
3	332	181.20	826.7		72.62
4	341	136.02	603.8		73.35
5	351	375.75	1,621.6		74.12
6	378	630.65	2,527.0		76.27
7	495	29.30	89.8		83.38
8	1,279	5.39	6.4		97.35
9	10,380	75.00	10.9	Upper Marker	113.00

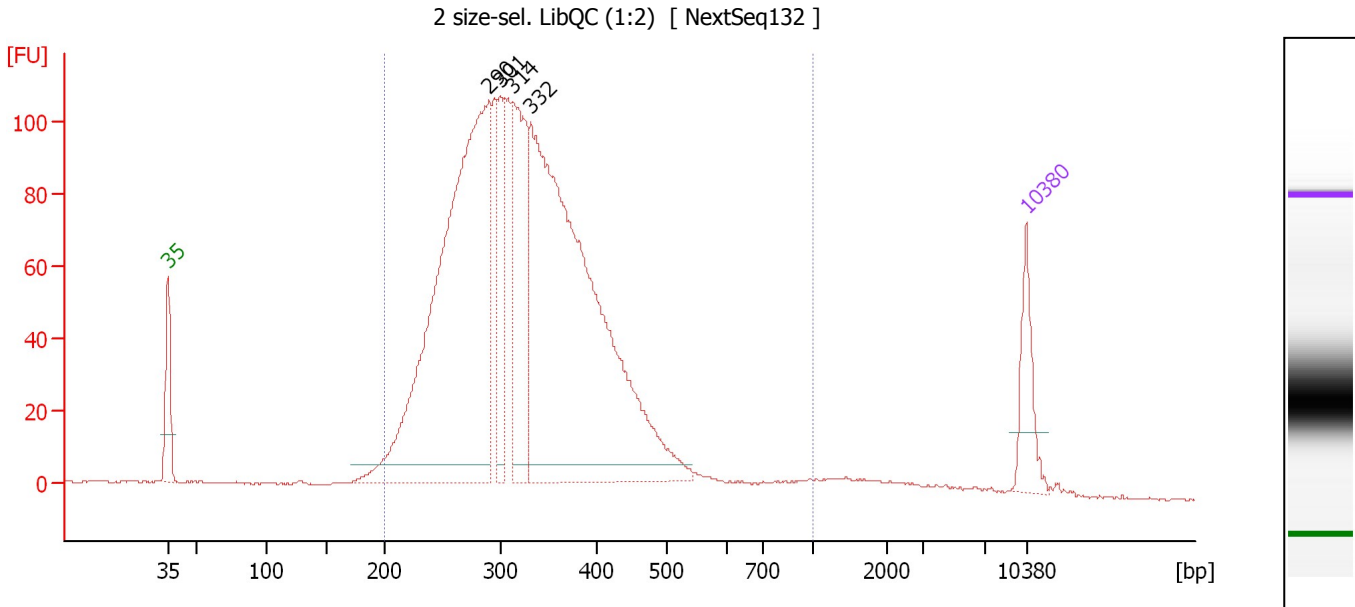
**Region table for sample 1 : 1 size-sel. LibQC (1:2)**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	368	2,894.28	1,279.8	12,984.0	93	30.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 2 size-sel. LibQC (1:2)**

Number of peaks found: 4                      Corr. Area 1: 2,175.6  
 Noise: 0.2

**Peak table for sample 2 : 2 size-sel. LibQC (1:2)**

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	290	1,330.87	6,952.0		69.14
3	301	162.39	817.5		70.15
4	314	337.54	1,630.4		71.16
5	332	1,415.94	6,470.0		72.57
6	10,380	75.00	10.9	Upper Marker	113.00

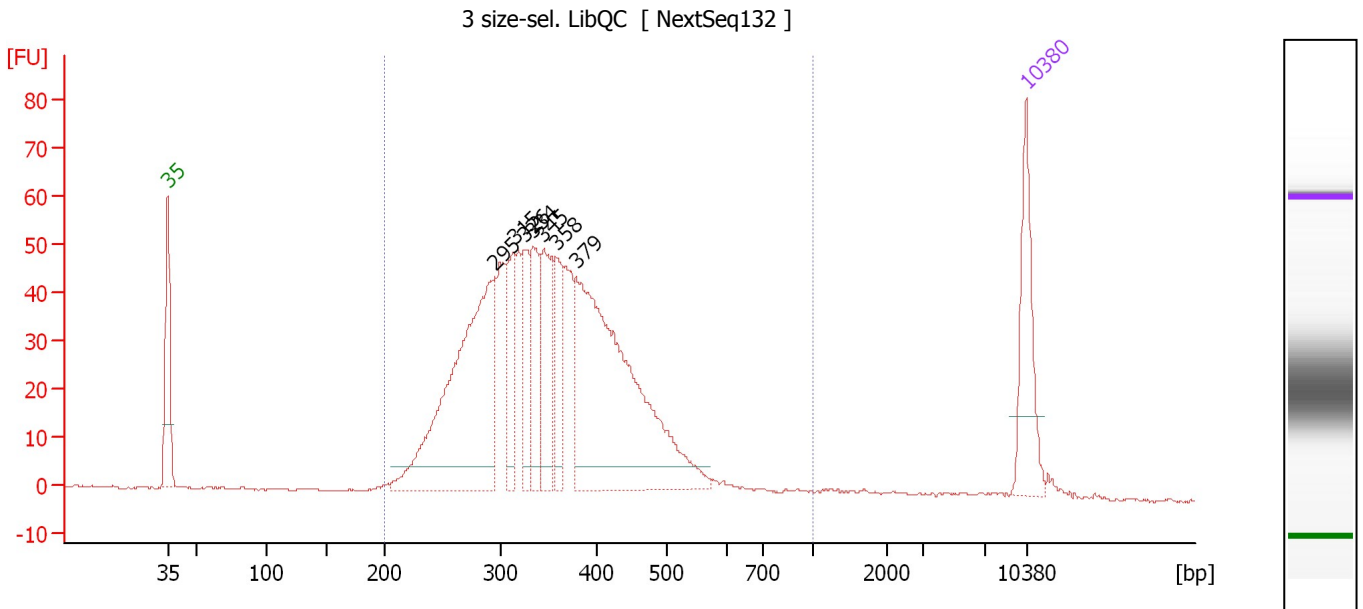
**Region table for sample 2 : 2 size-sel. LibQC (1:2)**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	335	3,664.83	2,175.6	17,783.8	95	26.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 3 size-sel. LibQC**

Number of peaks found: 7                      Corr. Area 1: 1,056.3  
 Noise: 0.2

**Peak table for sample 3 : 3 size-sel. LibQC**

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	295	412.98	2,118.3		69.64
3	315	79.49	382.9		71.22
4	326	69.64	324.0		72.11
5	334	87.74	398.1		72.76
6	345	98.31	431.7		73.65
7	358	57.33	242.6		74.67
8	379	444.19	1,777.8		76.30
9	10,380	75.00	10.9	Upper Marker	113.00

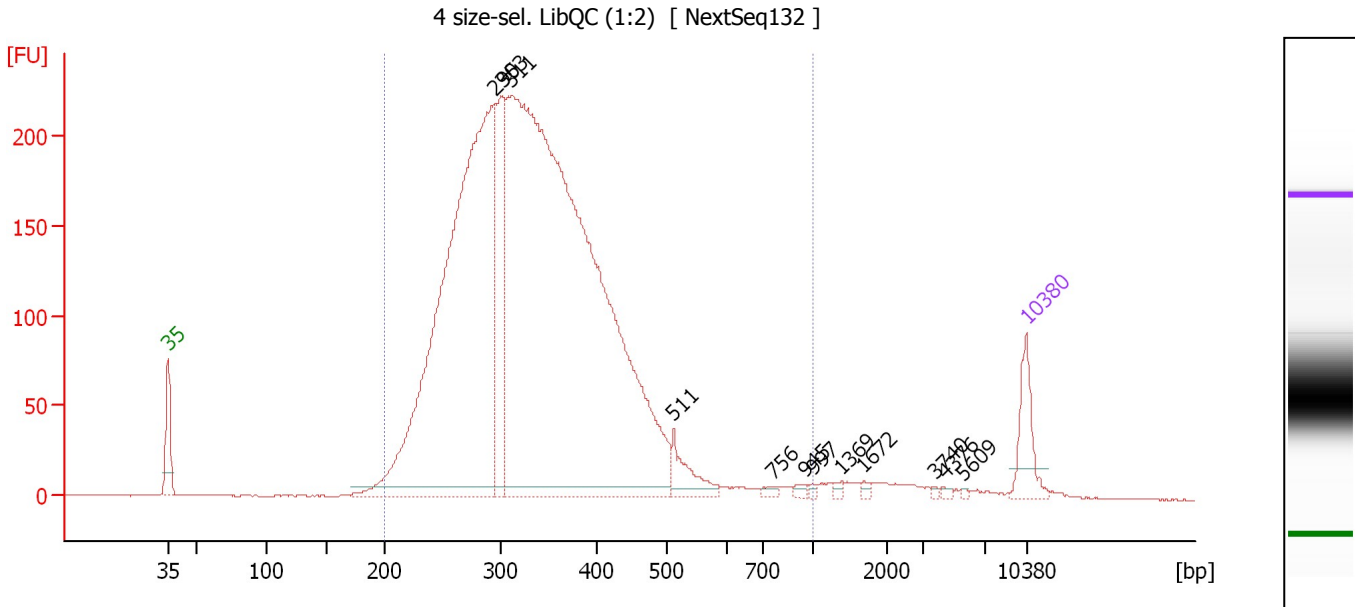
**Region table for sample 3 : 3 size-sel. LibQC**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	358	1,559.00	1,056.3	7,052.5	97	23.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 4 size-sel. LibQC (1:2)**

Number of peaks found: 12                      Corr. Area 1: 4,512.3  
 Noise: 0.2

**Peak table for sample 4 : 4 size-sel. LibQC (1:2)**

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	295	1,998.68	10,263.8		69.61
3	303	339.45	1,699.7		70.28
4	311	3,423.16	16,677.0		70.94
5	511	82.36	244.0		84.25
6	756	9.80	19.7		92.31
7	945	8.12	13.0		94.93
8	997	5.28	8.0		95.64
9	1,369	6.70	7.4		97.88
10	1,672	6.03	5.5		99.70
11	3,740	3.05	1.2		105.51
12	4,376	4.69	1.6		106.32
13	5,609	3.16	0.9		107.90
14	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : 4 size-sel. LibQC (1:2)**

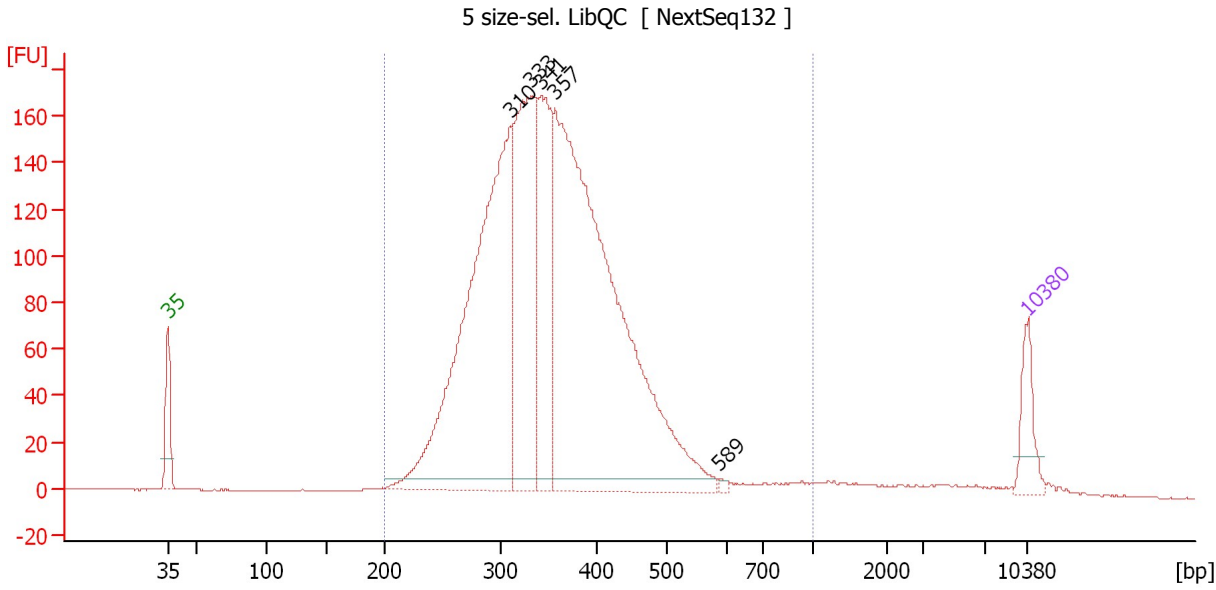
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	342	5,636.27	4,512.3	26,765.4	97	25.7



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 5 size-sel. LibQC**

Number of peaks found: 5                      Corr. Area 1: 3,043.4  
 Noise: 0.2

**Peak table for sample 5 : 5 size-sel. LibQC**

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	310	1,398.23	6,823.3		70.90
3	333	697.25	3,174.5		72.67
4	341	419.77	1,862.6		73.36
5	357	1,881.66	7,987.2		74.59
6	589	6.10	15.7		88.00
7	10,380	75.00	10.9	Upper Marker	113.00

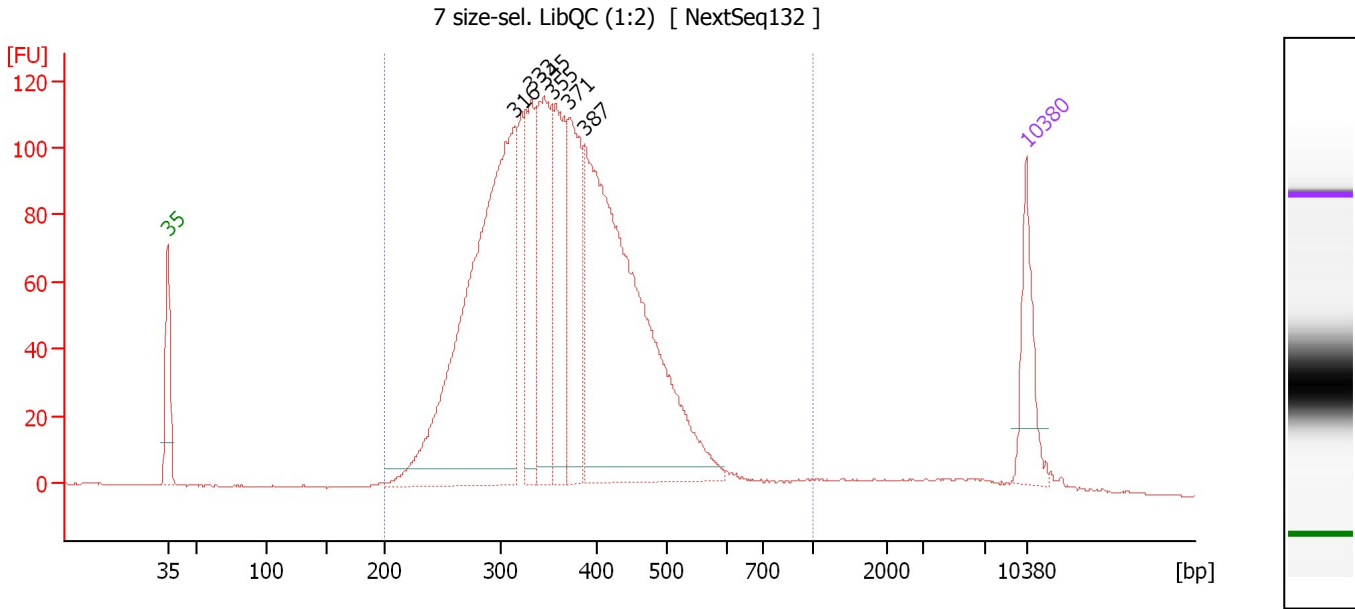
**Region table for sample 5 : 5 size-sel. LibQC**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	361	4,462.82	3,043.4	19,893.5	97	24.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 7 size-sel. LibQC (1:2)**

Number of peaks found: 6                      Corr. Area 1: 2,289.4  
 Noise: 0.2

**Peak table for sample 6 : 7 size-sel. LibQC (1:2)**

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	316	891.57	4,272.6		71.35
3	333	189.64	863.7		72.66
4	345	265.04	1,162.7		73.67
5	355	223.71	955.1		74.42
6	371	214.76	877.6		75.68
7	387	825.36	3,228.9		76.99
8	10,380	75.00	10.9	Upper Marker	113.00

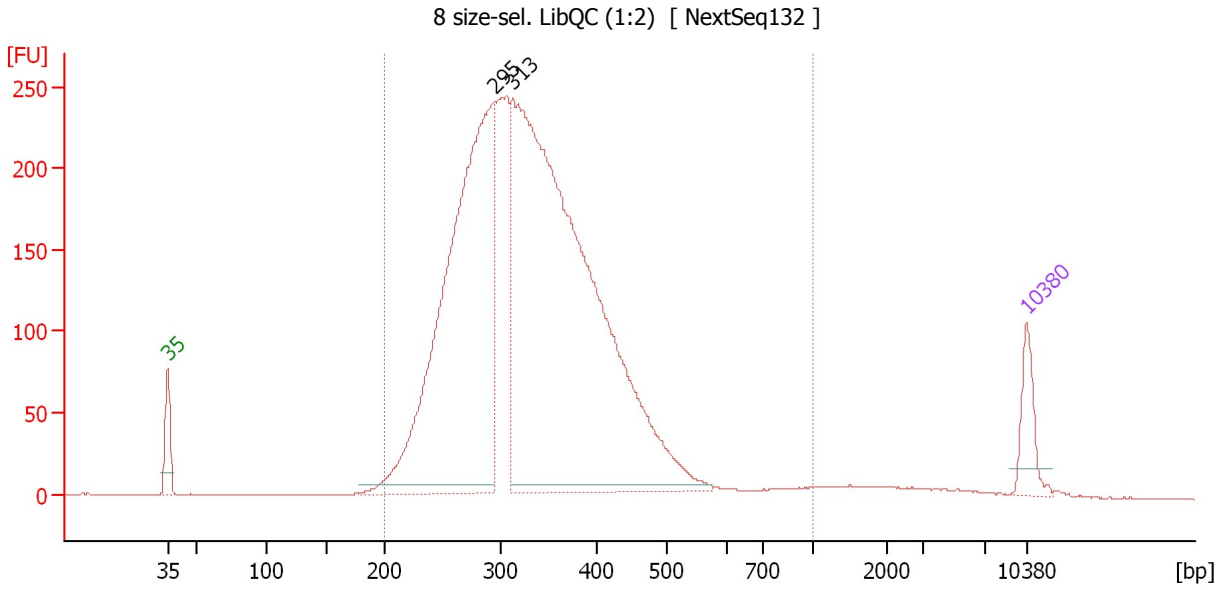
**Region table for sample 6 : 7 size-sel. LibQC (1:2)**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	370	2,839.74	2,289.4	12,424.7	97	23.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 8 size-sel. LibQC (1:2)**

Number of peaks found: 2                      Corr. Area 1: 4,593.9  
 Noise: 0.2

**Peak table for sample 7 : 8 size-sel. LibQC (1:2)**

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	295	1,732.82	8,885.8		69.65
3	313	2,713.86	13,120.1		71.13
4	10,380	75.00	10.9	Upper Marker	113.00

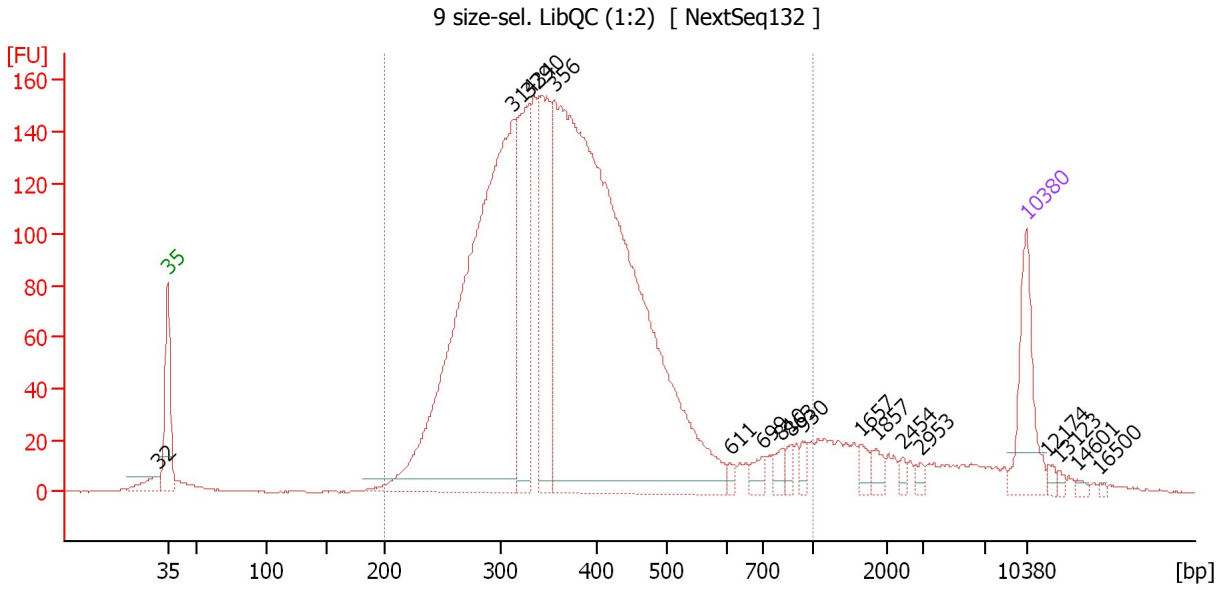
**Region table for sample 7 : 8 size-sel. LibQC (1:2)**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	338	4,859.94	4,593.9	23,203.9	97	24.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 9 size-sel. LibQC (1:2)**

Number of peaks found: 18                      Corr. Area 1: 3,265.2  
 Noise: 0.2

**Peak table for sample 8 : 9 size-sel. LibQC (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.17
2	35	125.00	5,411.3	Lower Marker	43.00
3	314	969.19	4,683.3		71.15
4	329	225.66	1,038.4		72.39
5	340	228.13	1,017.4		73.22
6	356	1,443.04	6,139.5		74.52
7	611	6.99	17.3		88.85
8	699	15.87	34.4		91.50
9	810	13.17	24.6		93.06
10	863	10.42	18.3		93.79
11	930	10.85	17.7		94.72
12	1,657	11.70	10.7		99.60
13	1,857	13.49	11.0		100.80
14	2,454	5.85	3.6		102.98
15	2,953	5.38	2.8		104.43
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,174	0.00	0.0		114.77
18	13,123	0.00	0.0		115.70
19	14,601	0.00	0.0		117.15
20	16,500	0.00	0.0		119.02

**Region table for sample 8 : 9 size-sel. LibQC (1:2)**

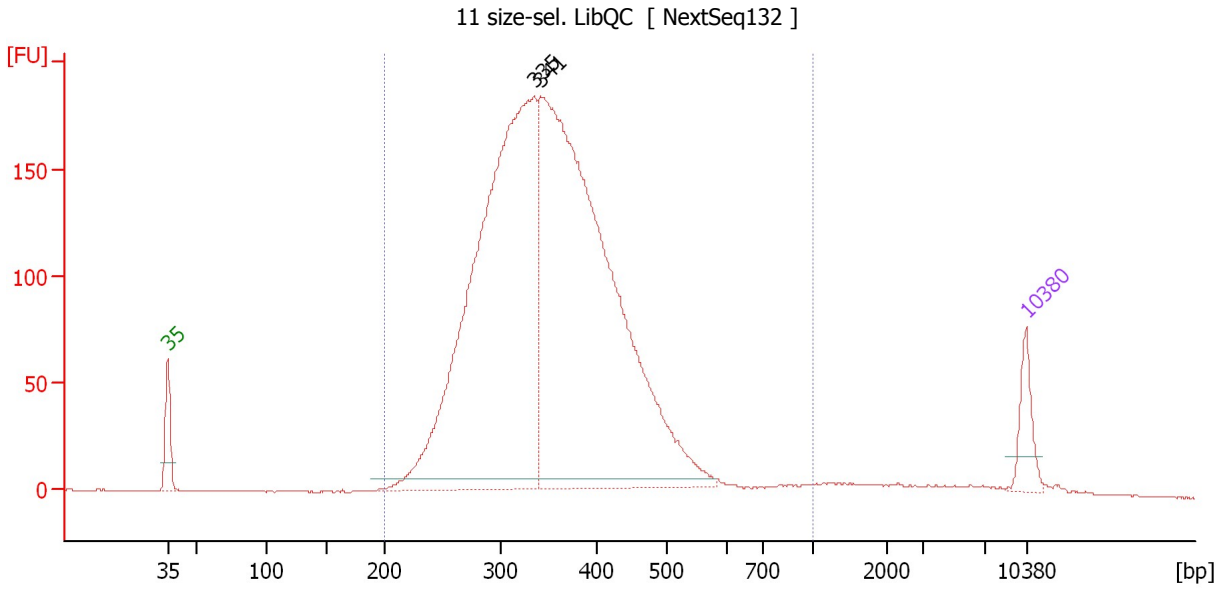
From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	383	3,051.75	3,265.2	13,281.1	90	31.4



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 11 size-sel. LibQC**

Number of peaks found: 2                      Corr. Area 1: 3,271.0  
 Noise: 0.2

**Peak table for sample 10 : 11 size-sel. LibQC**

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	335	2,266.69	10,241.6		72.87
3	341	2,568.20	11,401.0		73.35
4	10,380	75.00	10.9	Upper Marker	113.00

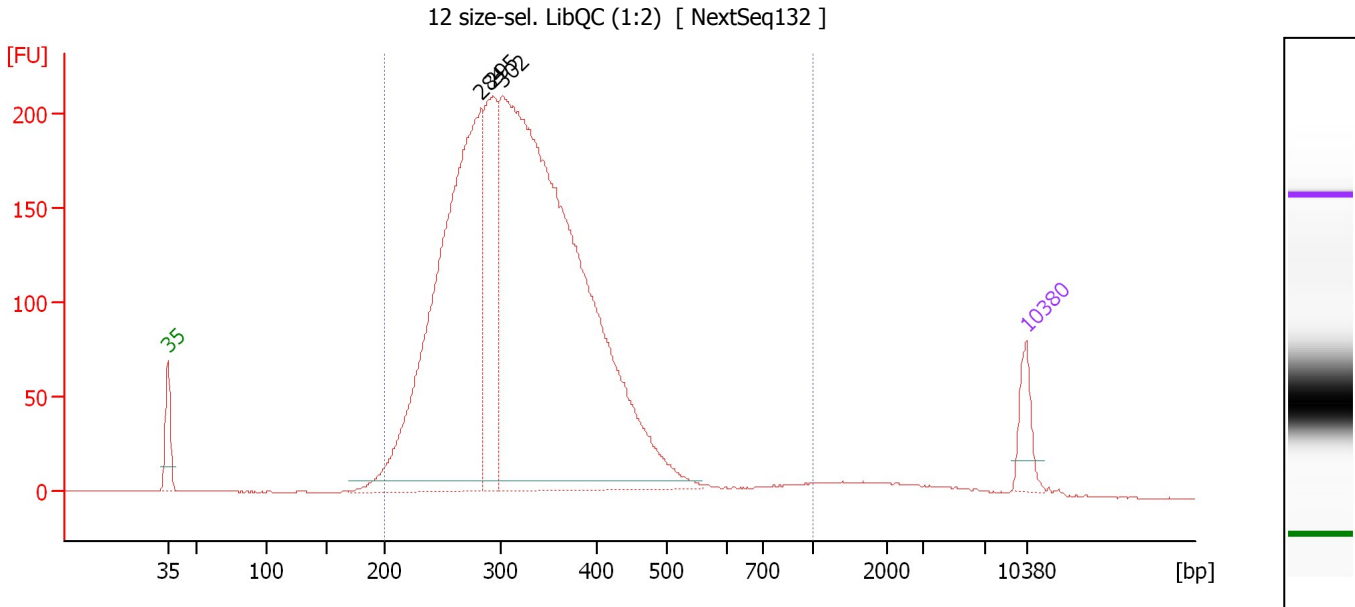
**Region table for sample 10 : 11 size-sel. LibQC**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	359	4,984.70	3,271.0	22,273.0	97	23.2

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 12 size-sel. LibQC (1:2)**

Number of peaks found: 3                      Corr. Area 1: 3,950.6  
 Noise: 0.2

**Peak table for sample 11 : 12 size-sel. LibQC (1:2)**

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	284	1,927.40	10,290.5		68.56
3	295	537.15	2,763.1		69.56
4	302	3,354.17	16,814.1		70.25
5	10,380	75.00	10.9	Upper Marker	113.00

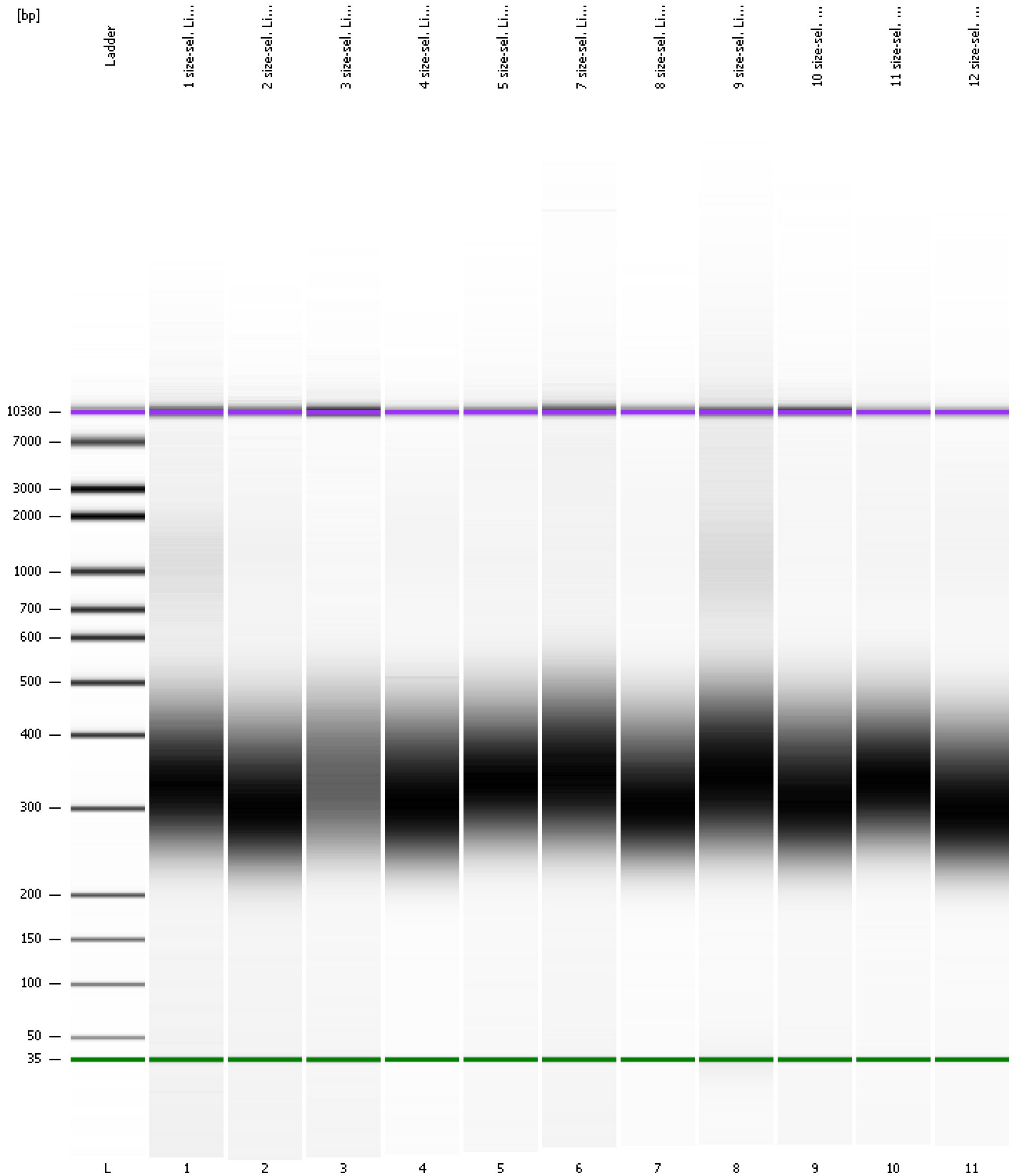
**Region table for sample 11 : 12 size-sel. LibQC (1:2)**

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	330	5,723.67	3,950.6	28,006.4	97	25.6

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
Modified: 10/10/2019 8:31:02 AM

**Gel Image**



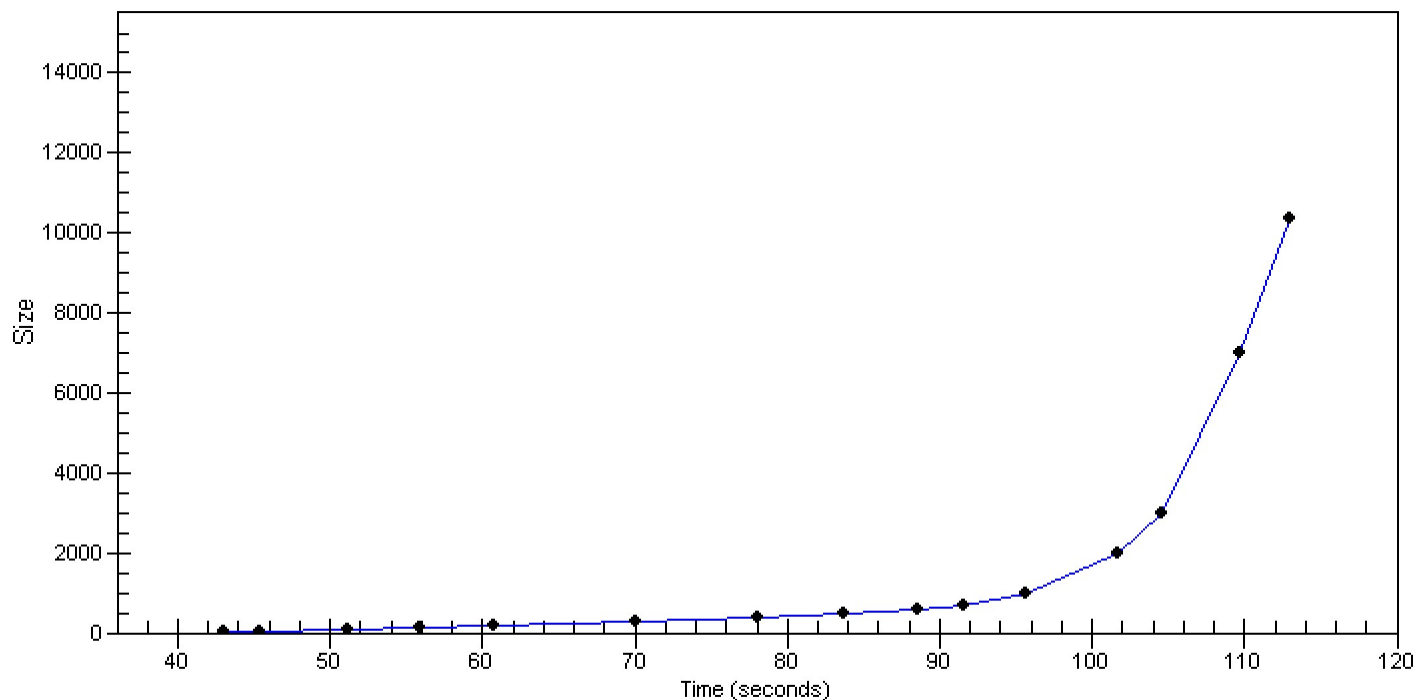


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
Modified: 10/10/2019 8:31:02 AM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-09\2019-10-09\_003.xad

Created: 10/9/2019 11:50:10 AM  
 Modified: 10/10/2019 8:31:02 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		10/9/2019 12:30:30 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\2019-10-09\2019-10-09_003.xad)		Instrument	Run		10/9/2019 11:50:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		10/9/2019 11:50:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/9/2019 11:50:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/9/2019 11:50:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		10/9/2019 11:50:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/9/2019 11:50:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/9/2019 11:50:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1