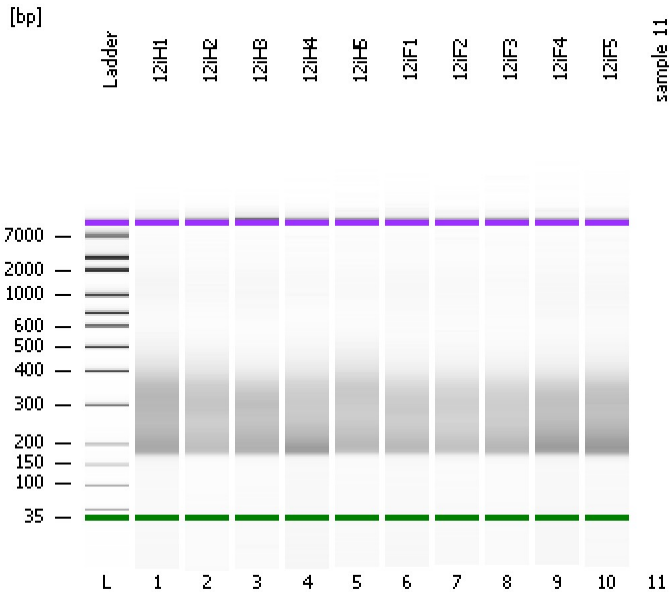


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
Modified: 10/28/2019 12:09:44 PM

Electrophoresis File Run Summary



Instrument Information:

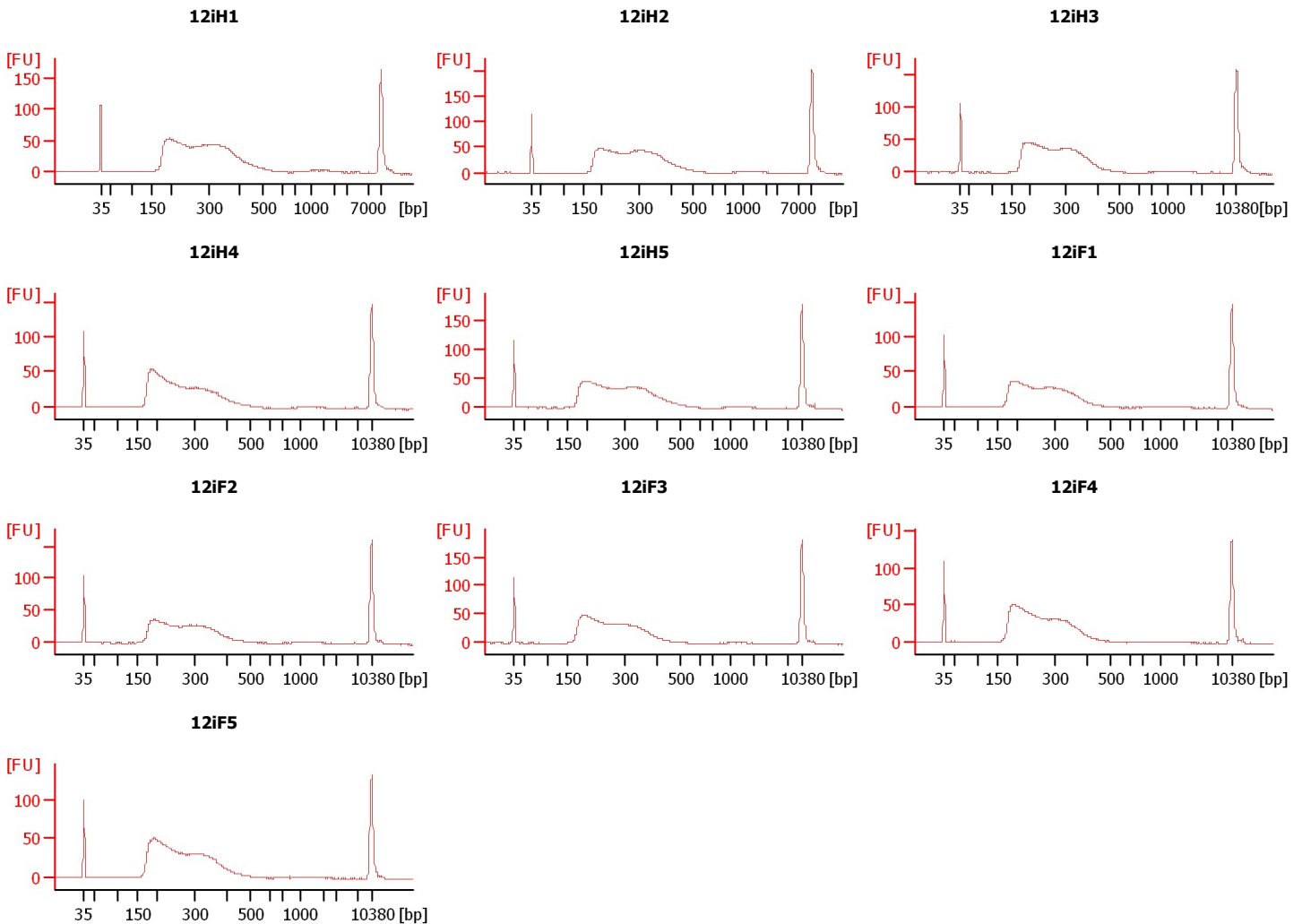
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
12iH1		<input type="checkbox"/>	✓			
12iH2		<input type="checkbox"/>	✓			
12iH3		<input type="checkbox"/>	✓			
12iH4		<input type="checkbox"/>	✓			
12iH5		<input type="checkbox"/>	✓			
12iF1		<input type="checkbox"/>	✓			
12iF2		<input type="checkbox"/>	✓			
12iF3		<input type="checkbox"/>	✓			
12iF4		<input type="checkbox"/>	✓			
12iF5		<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:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
Modified: 10/28/2019 12:09:44 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

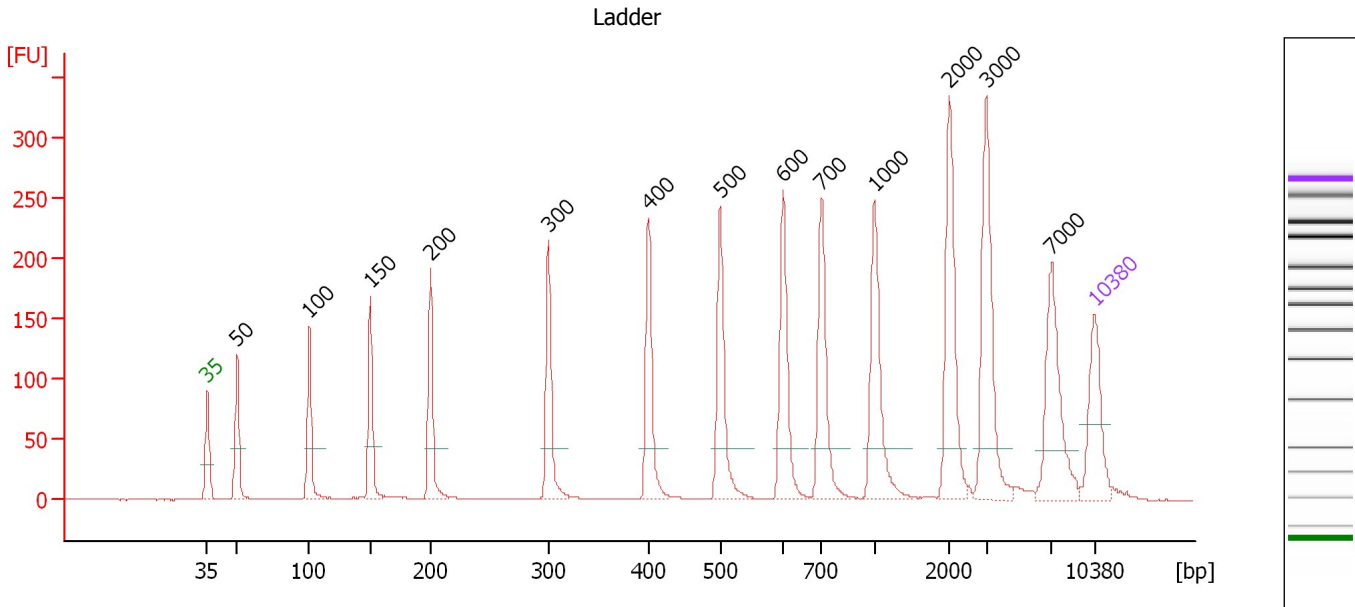
Ladder

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\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

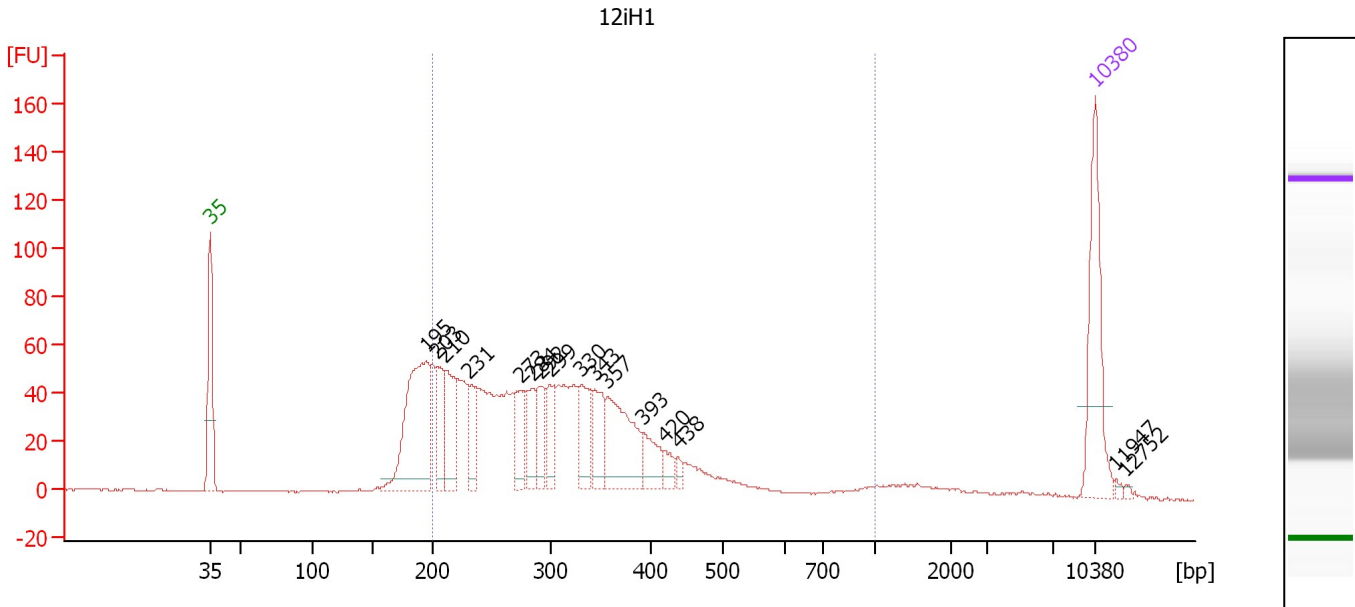
Peak table for Ladder

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	45.36
3	100	150.00	2,272.7	Ladder Peak	51.03
4	150	150.00	1,515.2	Ladder Peak	55.87
5	200	150.00	1,136.4	Ladder Peak	60.63
6	300	150.00	757.6	Ladder Peak	69.92
7	400	150.00	568.2	Ladder Peak	77.83
8	500	150.00	454.5	Ladder Peak	83.47
9	600	150.00	378.8	Ladder Peak	88.43
10	700	150.00	324.7	Ladder Peak	91.46
11	1,000	150.00	227.3	Ladder Peak	95.63
12	2,000	150.00	113.6	Ladder Peak	101.56
13	3,000	150.00	75.8	Ladder Peak	104.46
14	7,000	150.00	32.5	Ladder Peak	109.63
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 12iH1

Number of peaks found: 16 Corr. Area 1: 1,273.3
 Noise: 0.3

Peak table for sample 1 : 12iH1

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	195	183.61	1,429.0		60.12
3	203	46.03	343.3		60.92
4	210	73.31	529.0		61.55
5	231	41.44	272.0		63.49
6	273	35.20	195.0		67.46
7	284	39.13	208.5		68.47
8	292	39.16	203.4		69.14
9	299	34.55	174.9		69.86
10	330	43.46	199.8		72.27
11	343	41.58	183.4		73.36
12	357	93.63	397.6		74.42
13	393	30.92	119.4		77.24
14	420	12.40	44.7		78.97
15	438	6.04	20.9		79.98
16	10,380	75.00	10.9	Upper Marker	113.00
17	11,947	0.00	0.0		114.56
18	12,752	0.00	0.0		115.36

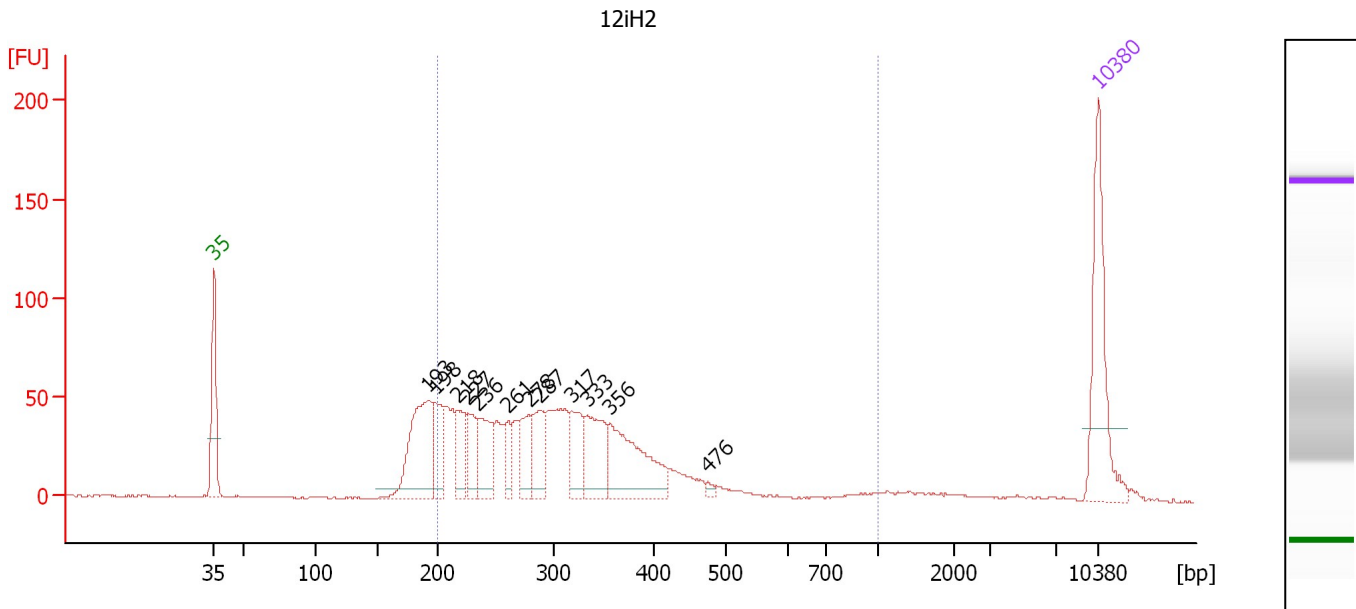
Region table for sample 1 : 12iH1

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	319	993.11	1,273.3	5,218.9	80	32.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 12iH2

Number of peaks found: 12 Corr. Area 1: 1,168.4
 Noise: 0.2

Peak table for sample 2 : 12iH2

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	193	121.85	956.0		59.97
3	198	50.18	383.1		60.48
4	218	39.48	273.9		62.34
5	227	37.02	247.0		63.14
6	236	55.55	357.2		63.94
7	261	21.15	122.7		66.31
8	278	39.98	217.6		67.91
9	287	41.64	219.5		68.75
10	317	44.46	212.7		71.24
11	333	62.14	283.0		72.51
12	356	94.99	404.0		74.37
13	476	3.75	12.0		82.10
14	10,380	75.00	10.9	Upper Marker	113.00

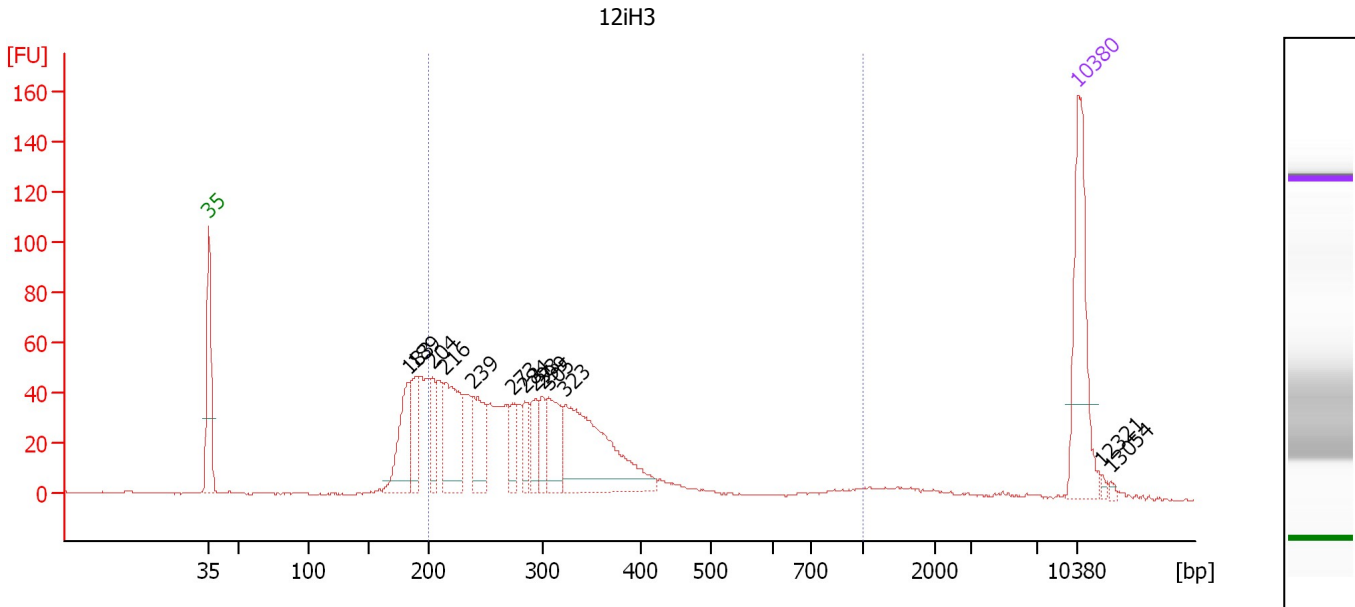
Region table for sample 2 : 12iH2

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	315	701.71	1,168.4	3,702.6	82	31.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

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 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 12iH3

Number of peaks found: 13 Corr. Area 1: 978.0
 Noise: 0.3

Peak table for sample 3 : 12iH3

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	183	67.31	557.0		59.02
3	189	39.94	319.5		59.62
4	204	34.95	259.6		60.99
5	216	86.12	605.5		62.07
6	239	55.71	353.1		64.26
7	273	24.21	134.2		67.44
8	284	22.22	118.4		68.47
9	293	27.51	142.2		69.28
10	299	22.47	113.8		69.84
11	305	52.55	260.7		70.36
12	323	153.64	721.1		71.73
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,321	0.00	0.0		114.93
15	13,054	0.00	0.0		115.66

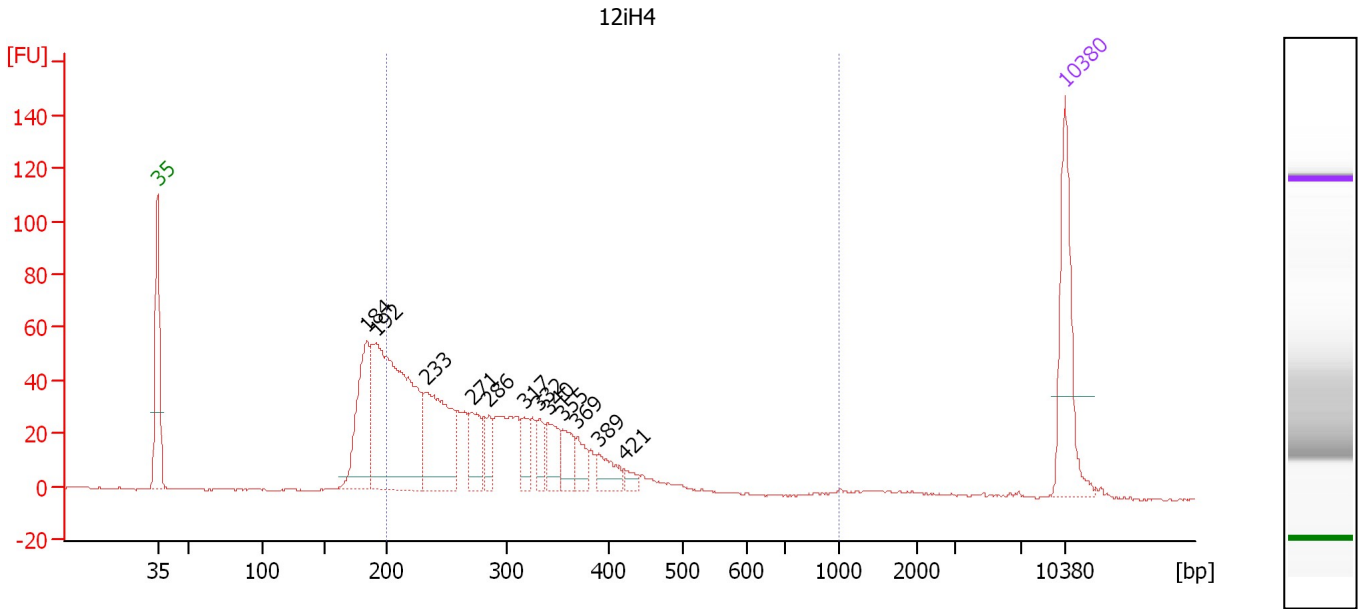
Region table for sample 3 : 12iH3

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	305	701.52	978.0	3,822.5	78	34.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

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 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 12iH4

Number of peaks found: 12 Corr. Area 1: 841.7
 Noise: 0.2

Peak table for sample 4 : 12iH4

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	184	115.81	952.3		59.13
3	192	325.02	2,563.5		59.88
4	233	134.25	871.4		63.73
5	271	41.04	229.4		67.24
6	286	26.56	140.8		68.60
7	317	22.85	109.2		71.27
8	332	22.49	102.6		72.46
9	340	33.39	148.7		73.11
10	355	25.76	110.0		74.25
11	369	20.55	84.5		75.35
12	389	25.23	98.2		76.97
13	421	8.86	31.9		79.03
14	10,380	75.00	10.9	Upper Marker	113.00

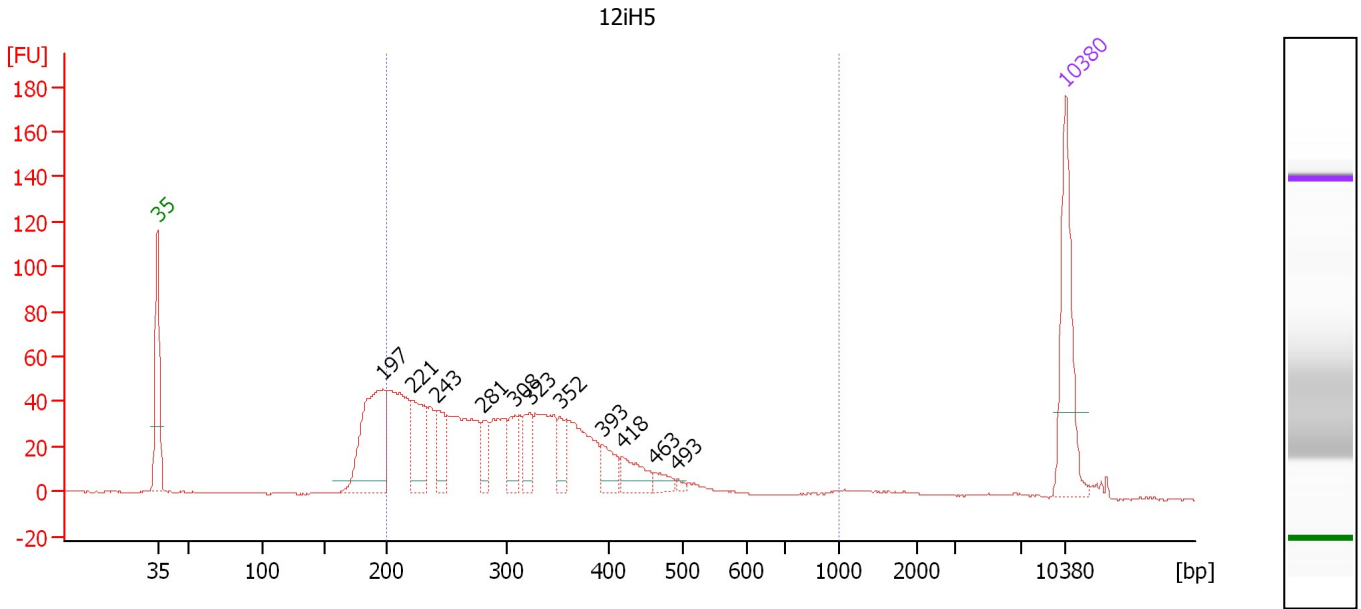
Region table for sample 4 : 12iH4

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	295	751.51	841.7	4,154.9	77	27.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 12iH5

Number of peaks found: 11 Corr. Area 1: 1,047.3
 Noise: 0.3

Peak table for sample 5 : 12iH5

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	197	151.08	1,159.7		60.38
3	221	72.23	494.3		62.62
4	243	40.15	250.8		64.59
5	281	27.30	147.4		68.12
6	308	32.19	158.1		70.59
7	323	30.47	142.9		71.75
8	352	22.40	96.4		74.04
9	393	24.31	93.6		77.31
10	418	27.32	98.9		78.87
11	463	10.85	35.5		81.38
12	493	2.94	9.0		83.08
13	10,380	75.00	10.9	Upper Marker	113.00

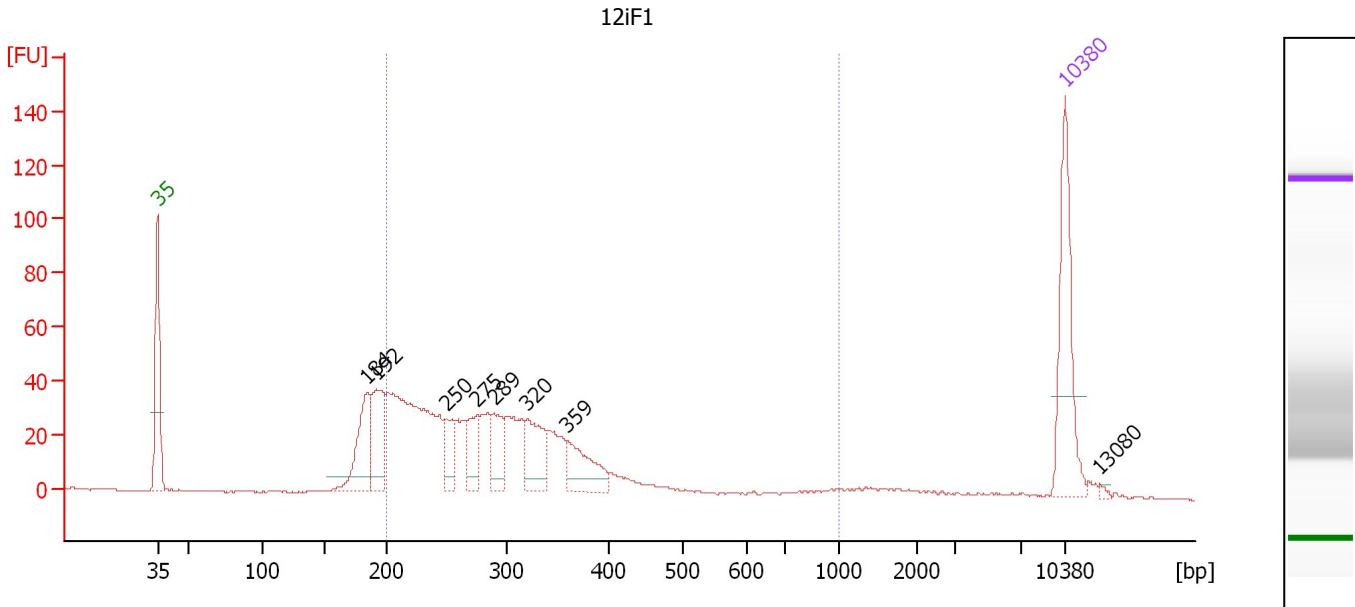
Region table for sample 5 : 12iH5

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	317	806.03	1,047.3	4,247.4	82	31.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 12iF1

Number of peaks found: 8 Corr. Area 1: 727.3
 Noise: 0.2

Peak table for sample 6 : 12iF1

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	184	72.34	594.7		59.13
3	192	70.46	554.8		59.91
4	250	32.42	196.4		65.29
5	275	36.52	201.1		67.61
6	289	38.06	199.3		68.93
7	320	52.16	247.2		71.48
8	359	47.54	200.4		74.63
9	10,380	75.00	10.9	Upper Marker	113.00
10	13,080	0.00	0.0		115.69

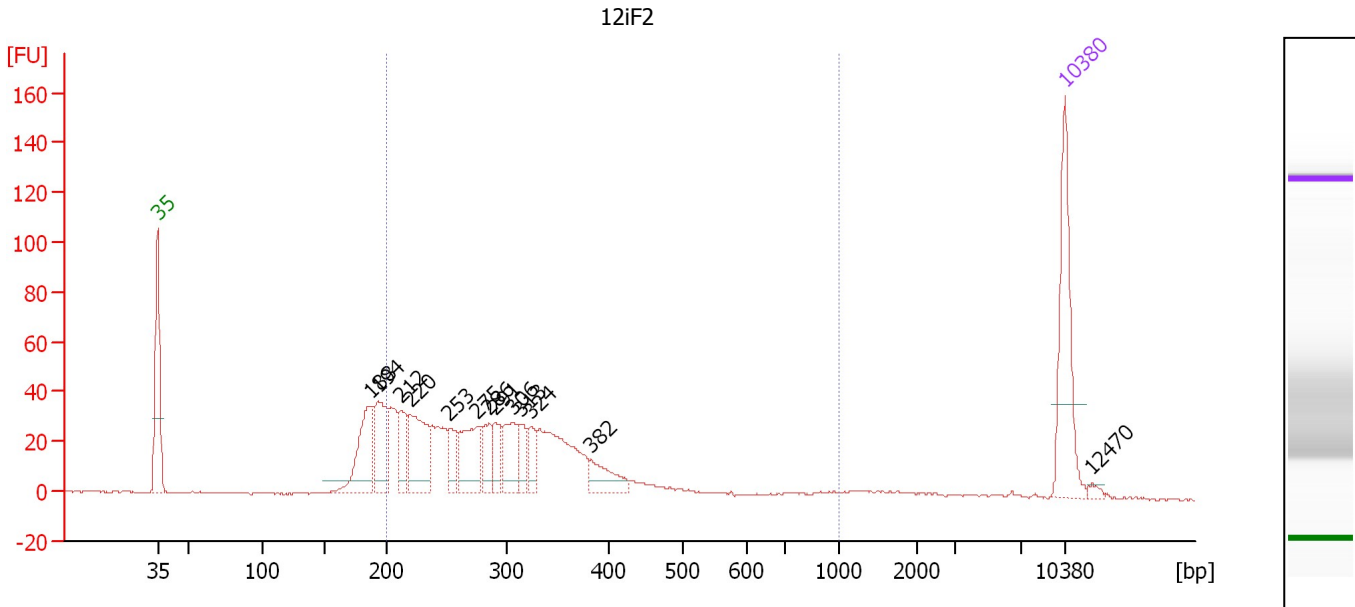
Region table for sample 6 : 12iF1

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	304	649.00	727.3	3,535.9	78	33.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 12iF2

Number of peaks found: 13 Corr. Area 1: 723.6
 Noise: 0.3

Peak table for sample 7 : 12iF2

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	188	81.16	653.4		59.51
3	194	66.43	520.0		60.01
4	212	34.85	249.3		61.73
5	220	83.60	576.3		62.46
6	253	24.48	146.8		65.52
7	275	56.44	310.4		67.64
8	286	29.39	155.8		68.61
9	291	24.26	126.4		69.08
10	306	45.05	222.9		70.42
11	313	20.79	100.5		70.97
12	324	21.05	98.5		71.80
13	382	29.05	115.1		76.43
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,470	0.00	0.0		115.08

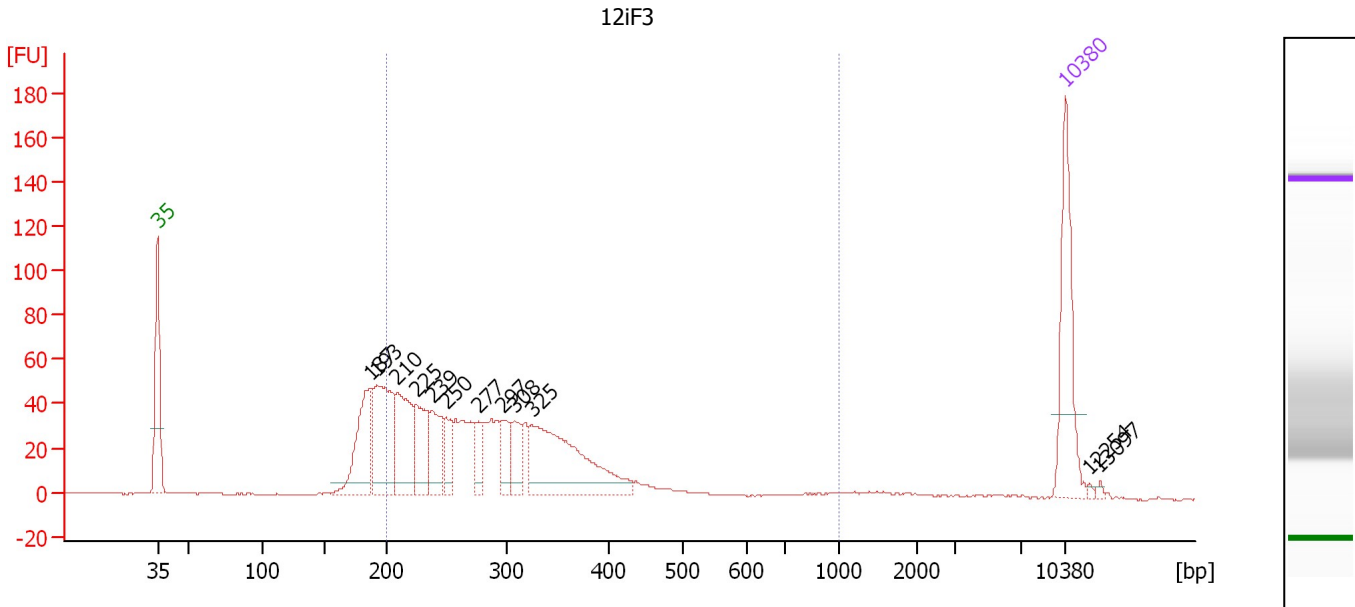
Region table for sample 7 : 12iF2

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	306	646.74	723.6	3,491.7	80	32.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

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 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 12iF3

Number of peaks found: 12 Corr. Area 1: 882.6
 Noise: 0.2

Peak table for sample 8 : 12iF3

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	187	97.62	789.8		59.42
3	193	123.43	970.7		59.93
4	210	91.44	661.2		61.51
5	225	66.46	447.3		62.96
6	239	52.49	333.2		64.22
7	250	29.15	176.9		65.25
8	277	24.32	133.1		67.76
9	297	32.56	166.2		69.63
10	308	31.12	153.1		70.56
11	325	162.10	756.7		71.87
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,254	0.00	0.0		114.87
14	13,097	0.00	0.0		115.70

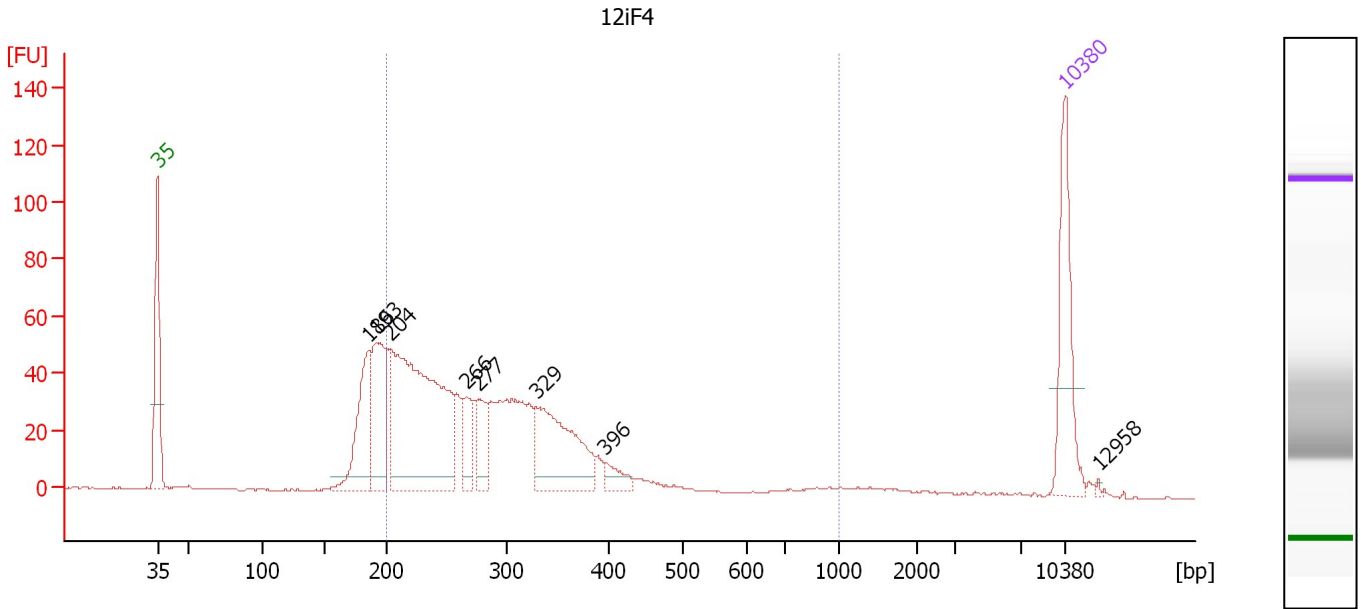
Region table for sample 8 : 12iF3

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	300	705.65	882.6	3,870.1	79	31.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

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 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 12iF4

Number of peaks found: 8 Corr. Area 1: 892.7
 Noise: 0.2

Peak table for sample 9 : 12iF4

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	186	106.98	871.9		59.29
3	193	124.24	976.5		59.94
4	204	367.30	2,725.9		61.01
5	266	41.66	237.0		66.80
6	277	41.81	228.3		67.83
7	329	138.18	636.4		72.21
8	396	17.63	67.4		77.53
9	10,380	75.00	10.9	Upper Marker	113.00
10	12,958	0.00	0.0		115.57

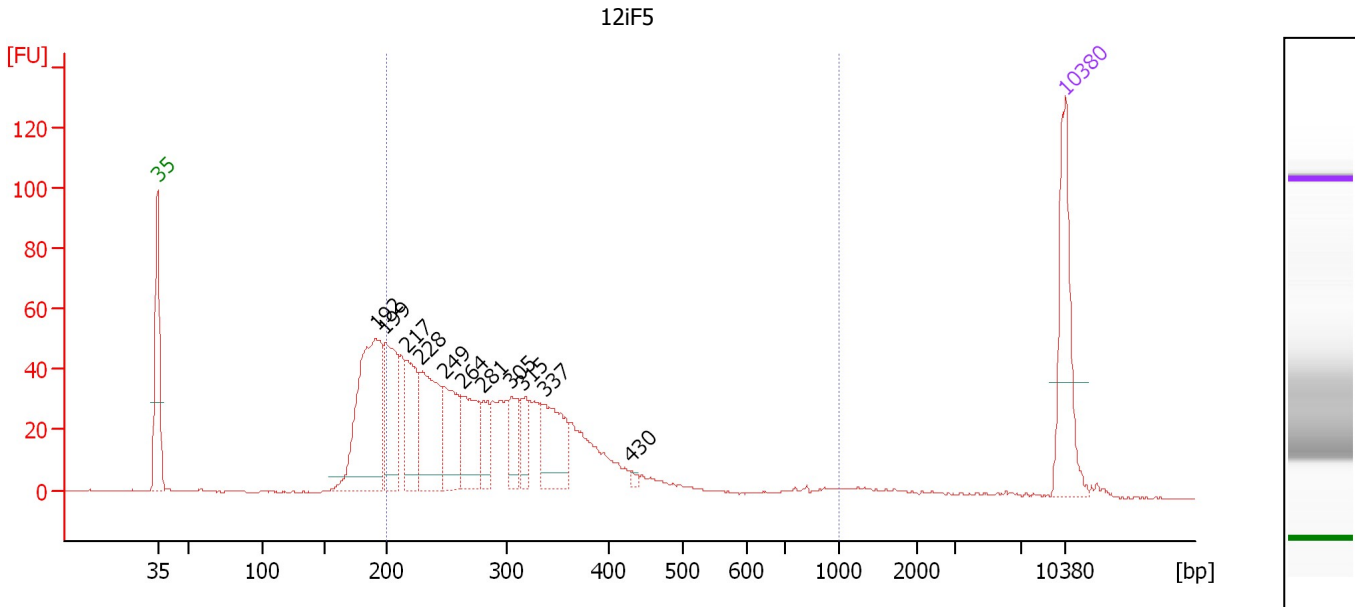
Region table for sample 9 : 12iF4

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	302	870.45	892.7	4,795.7	77	34.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 12iF5

Number of peaks found: 11 Corr. Area 1: 893.5
 Noise: 0.2

Peak table for sample 10 : 12iF5

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	192	219.44	1,733.5		59.85
3	199	109.10	830.0		60.55
4	217	77.25	538.9		62.23
5	228	112.56	747.1		63.25
6	249	76.55	466.1		65.17
7	264	69.99	401.9		66.57
8	281	33.29	179.5		68.15
9	305	38.66	192.2		70.30
10	315	27.61	132.9		71.09
11	337	73.74	331.9		72.82
12	430	3.95	13.9		79.54
13	10,380	75.00	10.9	Upper Marker	113.00

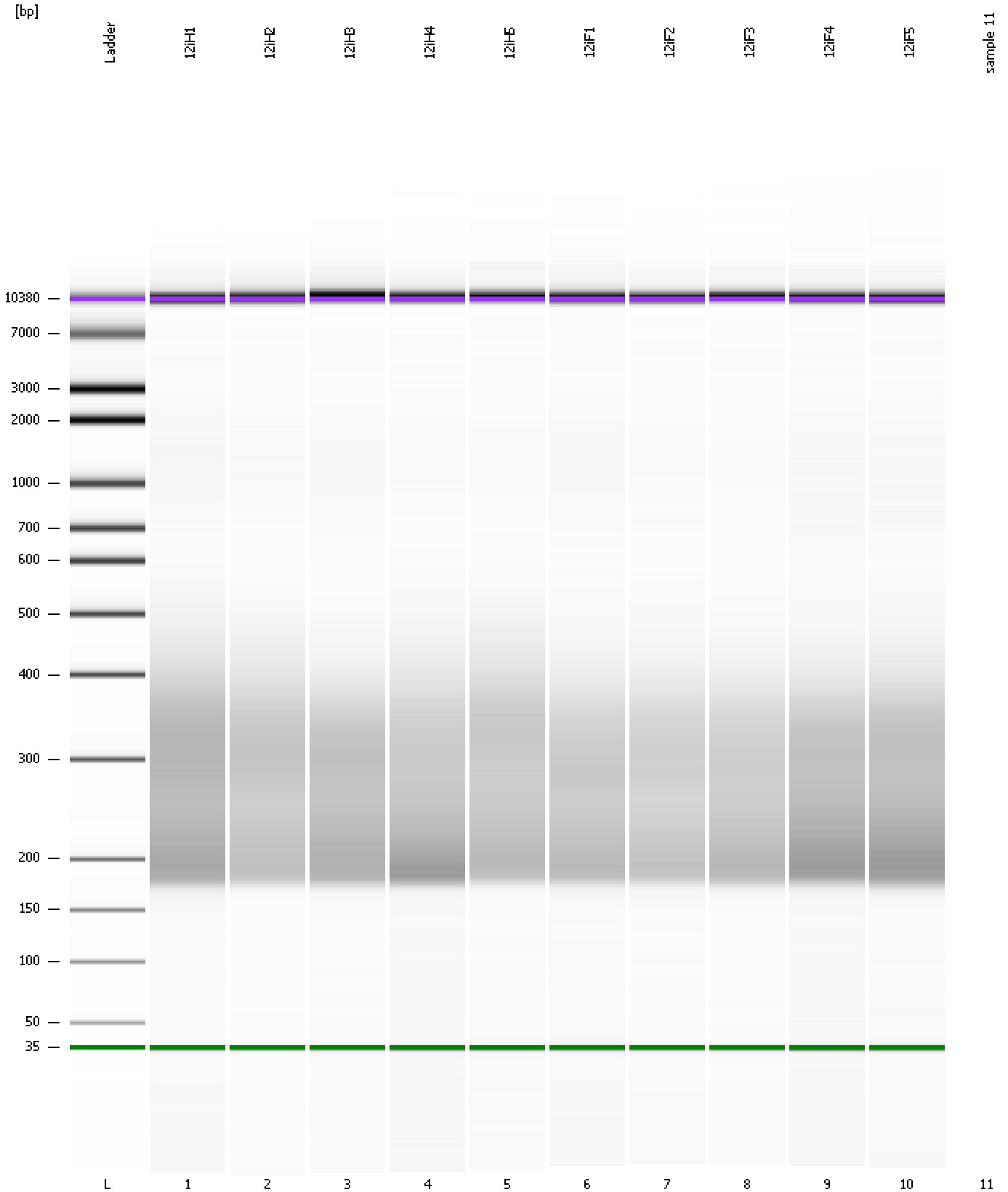
Region table for sample 10 : 12iF5

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	306	903.53	893.5	4,925.3	78	34.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
Modified: 10/28/2019 12:09:44 PM

Gel Image

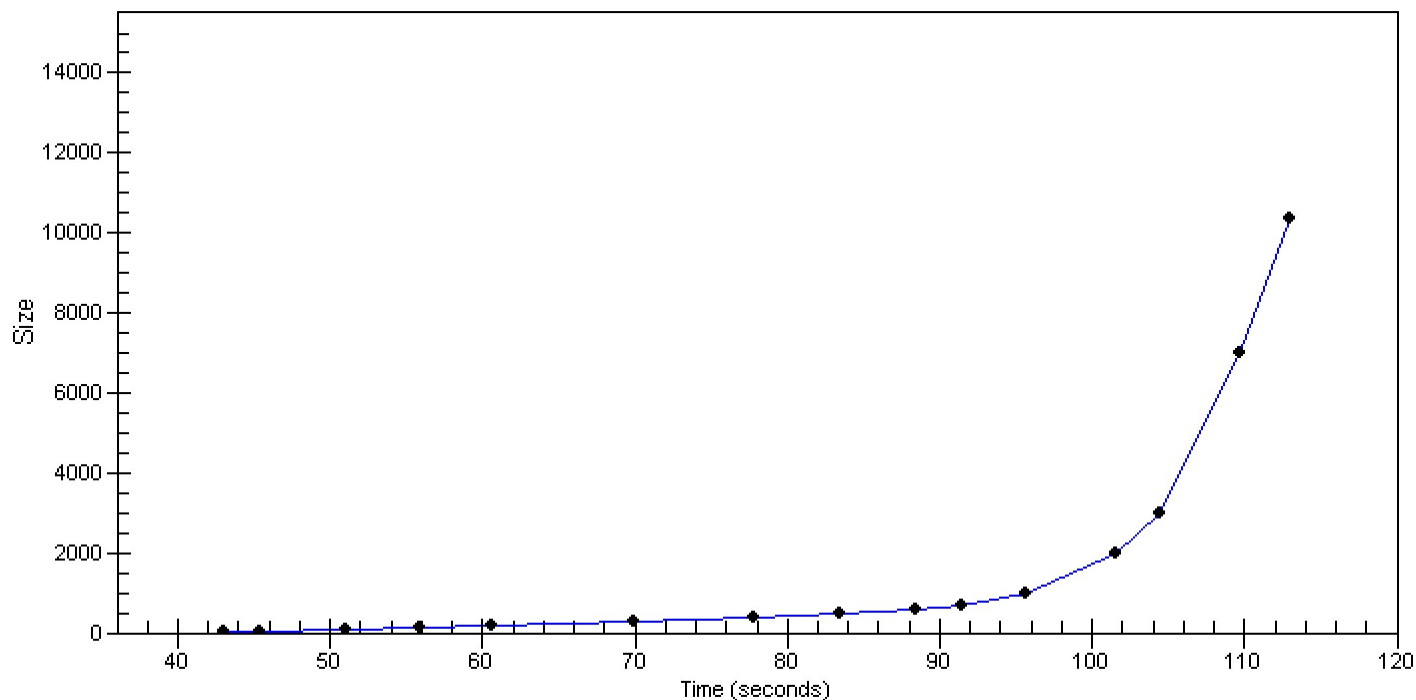


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
Modified: 10/28/2019 12:09:44 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
Modified: 10/28/2019 12:09:44 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-10-28\2019-10-28_001.xad

Created: 10/28/2019 11:31:19 AM
 Modified: 10/28/2019 12:09:44 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		10/28/2019 12:09:43 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\2019-10-28\2019-10-28_001.xad)		Instrument	Run		10/28/2019 11:31:25 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		10/28/2019 11:31:25 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/28/2019 11:31:25 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/28/2019 11:31:25 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		10/28/2019 11:31:25 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/28/2019 11:31:25 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/28/2019 11:31:25 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1