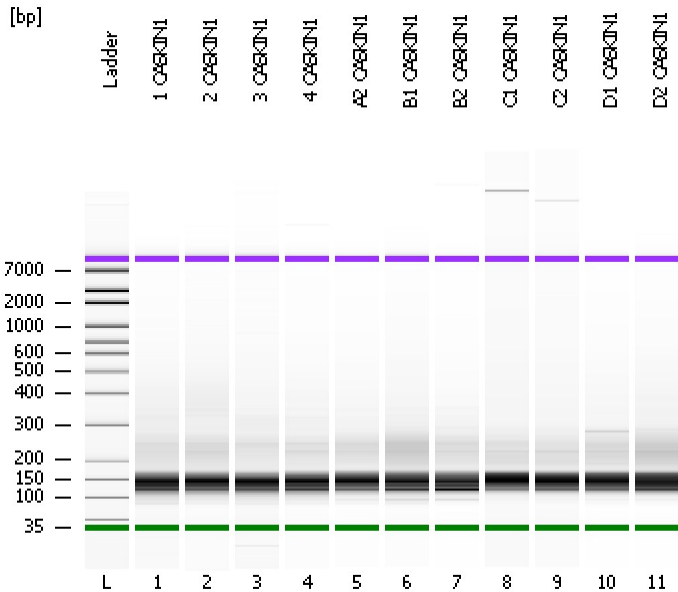


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
Modified: 4/10/2018 12:48:46 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

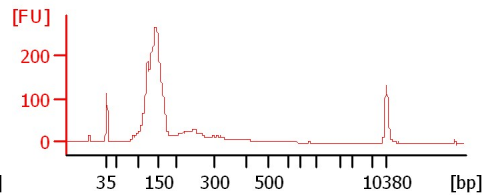
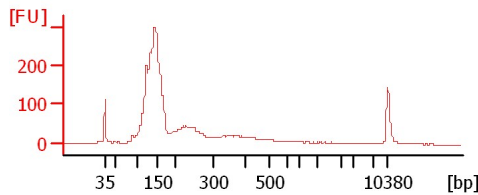
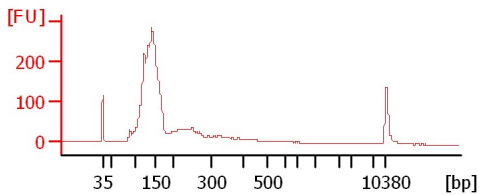
Chip Information:

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

1 CASKIN1

2 CASKIN1

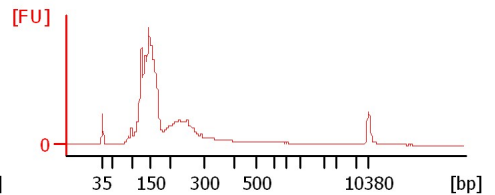
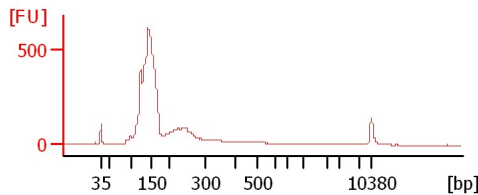
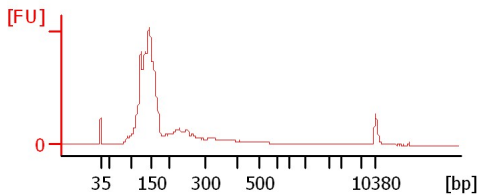
3 CASKIN1



4 CASKIN1

A2 CASKIN1

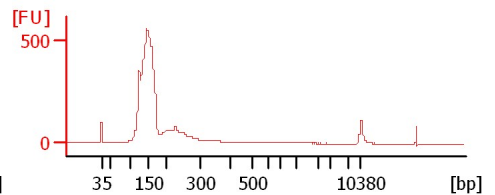
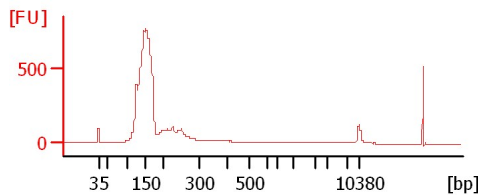
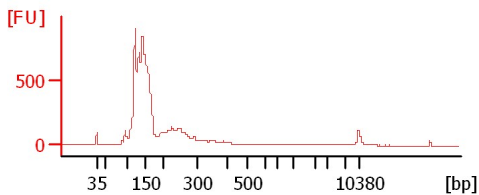
B1 CASKIN1



B2 CASKIN1

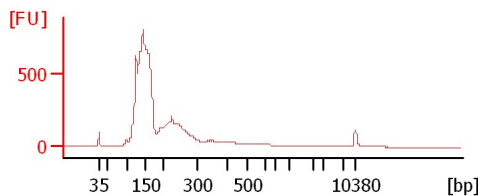
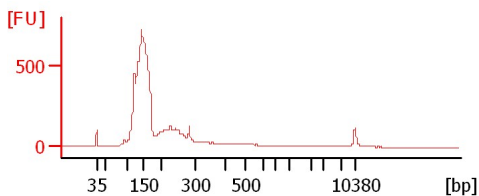
C1 CASKIN1

C2 CASKIN1



D1 CASKIN1

D2 CASKIN1



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
Modified: 4/10/2018 12:48:46 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
1 CASKIN1		<input type="checkbox"/>	✓			
2 CASKIN1		<input type="checkbox"/>	✓			
3 CASKIN1		<input type="checkbox"/>	✓			
4 CASKIN1		<input type="checkbox"/>	✓			
A2 CASKIN1		<input type="checkbox"/>	✓			
B1 CASKIN1		<input type="checkbox"/>	✓			
B2 CASKIN1		<input type="checkbox"/>	✓			
C1 CASKIN1		<input type="checkbox"/>	✓			
C2 CASKIN1		<input type="checkbox"/>	✓			
D1 CASKIN1		<input type="checkbox"/>	✓			
D2 CASKIN1		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

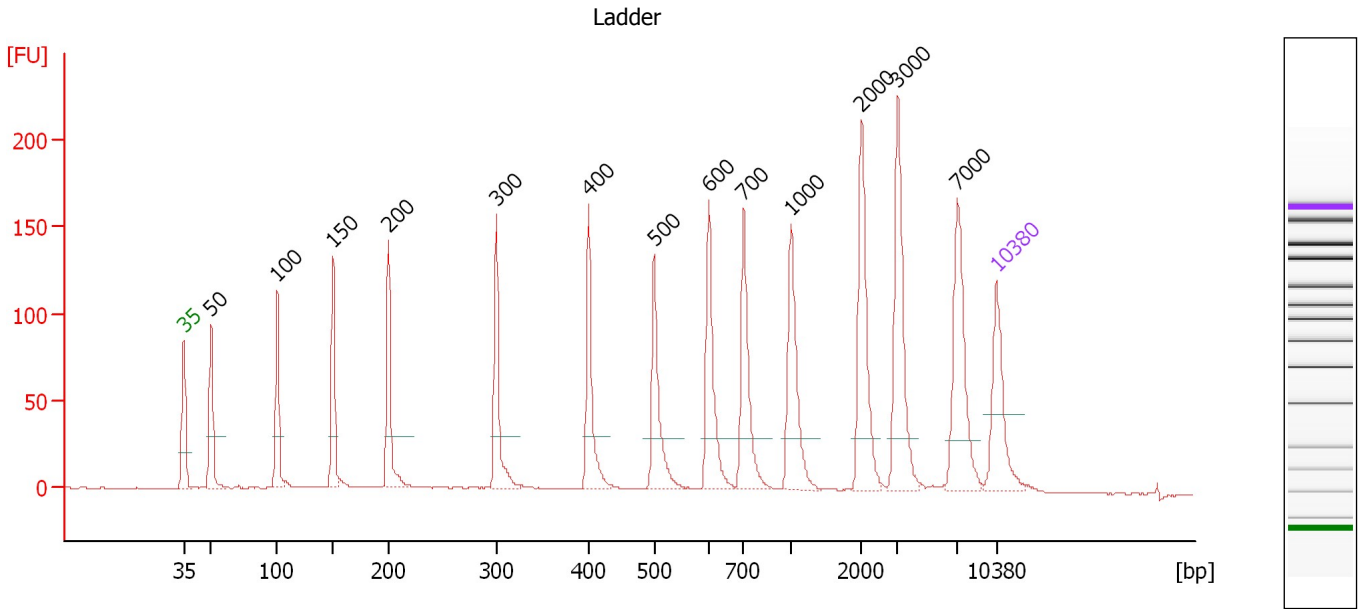
Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

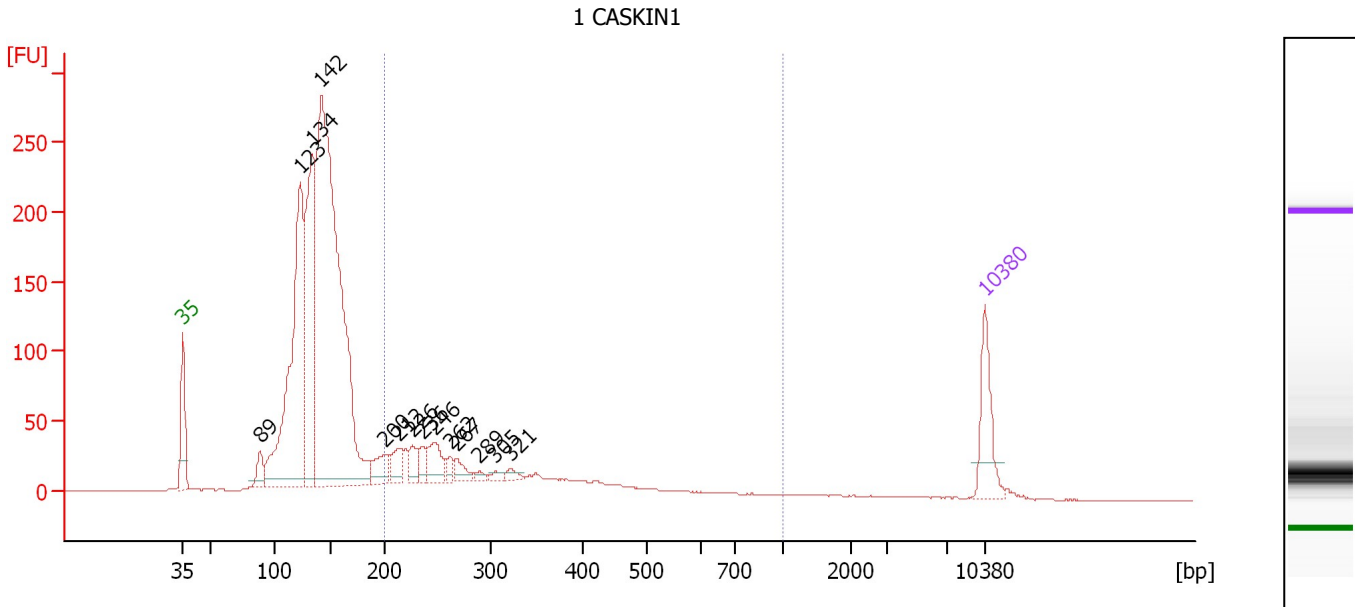
Peak table for Ladder

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	45.34
3	100	150.00	2,272.7	Ladder Peak	51.04
4	150	150.00	1,515.2	Ladder Peak	55.86
5	200	150.00	1,136.4	Ladder Peak	60.64
6	300	150.00	757.6	Ladder Peak	69.92
7	400	150.00	568.2	Ladder Peak	77.86
8	500	150.00	454.5	Ladder Peak	83.51
9	600	150.00	378.8	Ladder Peak	88.24
10	700	150.00	324.7	Ladder Peak	91.23
11	1,000	150.00	227.3	Ladder Peak	95.32
12	2,000	150.00	113.6	Ladder Peak	101.38
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\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 1 CASKIN1

Number of peaks found: 14 Corr. Area 1: 640.8
 Noise: 0.4

Peak table for sample 1 : 1 CASKIN1

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	89	43.78	748.0		49.75
3	123	695.17	8,575.8		53.24
4	134	495.21	5,602.7		54.31
5	142	1,444.45	15,399.1		55.10
6	200	55.34	419.2		60.64
7	212	46.30	330.8		61.76
8	226	34.13	228.7		63.06
9	236	30.98	199.2		63.94
10	246	61.59	379.1		64.92
11	262	15.96	92.4		66.36
12	267	27.00	153.1		66.88
13	289	9.04	47.4		68.88
14	305	11.19	55.7		70.27
15	321	12.72	59.9		71.62
16	10,380	75.00	10.9	Upper Marker	113.00

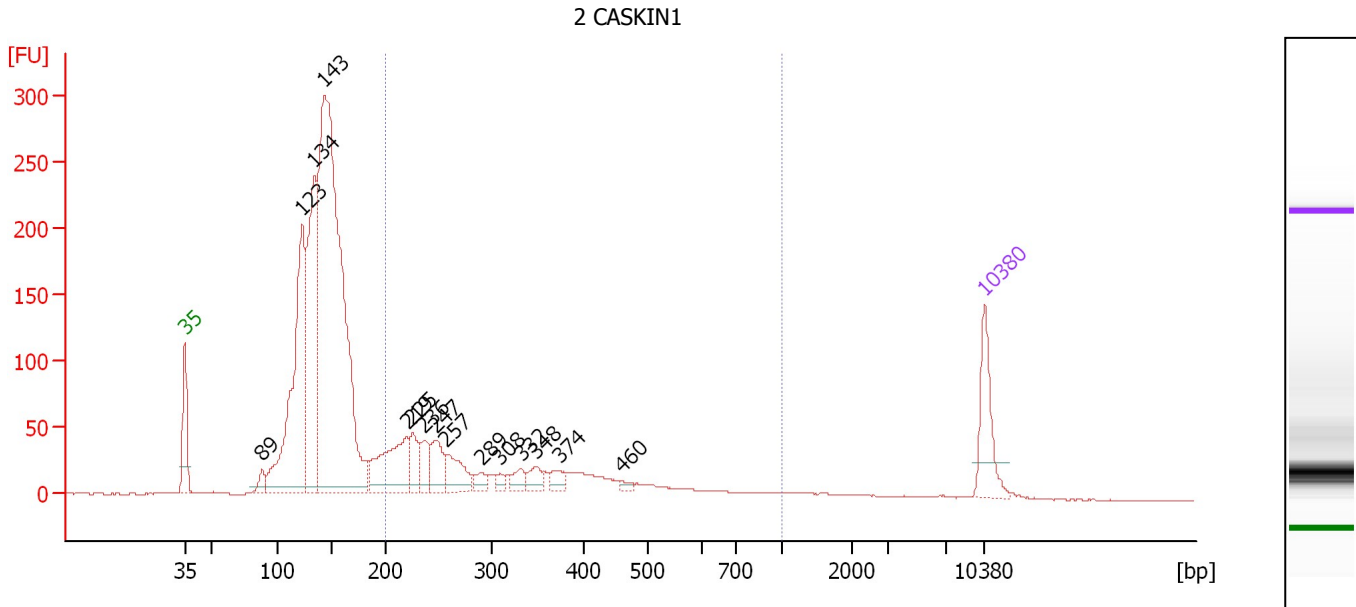
Region table for sample 1 : 1 CASKIN1

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	320	610.62	640.8	3,309.0	21	38.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 2 CASKIN1

Number of peaks found: 15 Corr. Area 1: 854.9
 Noise: 0.4

Peak table for sample 2 : 2 CASKIN1

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	89	26.25	447.6		49.77
3	123	564.31	6,945.4		53.27
4	134	435.09	4,911.1		54.34
5	143	1,421.69	15,018.9		55.23
6	219	170.39	1,178.1		62.41
7	225	52.98	357.3		62.93
8	236	47.40	304.7		63.95
9	247	68.74	422.0		64.98
10	257	68.60	404.7		65.91
11	289	21.58	113.1		68.90
12	308	14.07	69.1		70.58
13	332	24.43	111.5		72.45
14	348	27.06	117.7		73.75
15	374	23.14	93.8		75.76
16	460	7.70	25.4		81.27
17	10,380	75.00	10.9	Upper Marker	113.00

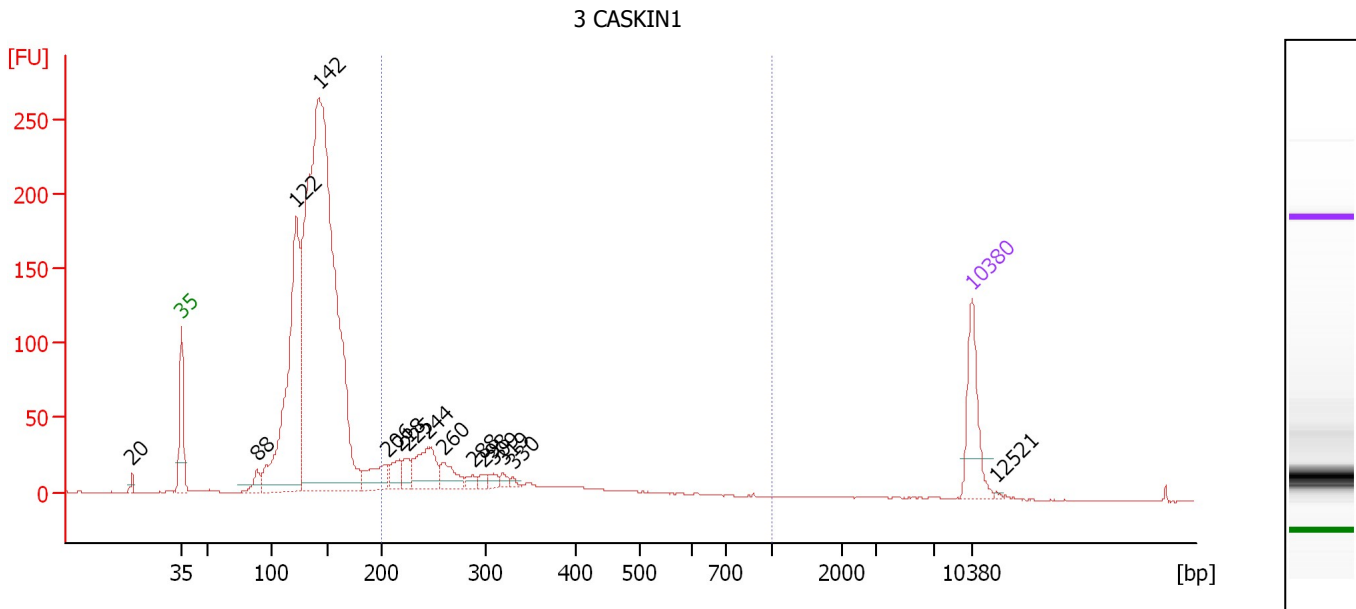
Region table for sample 2 : 2 CASKIN1

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	340	724.54	854.9	3,806.8	26	40.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 3 CASKIN1

Number of peaks found: 15 Corr. Area 1: 465.0
 Noise: 0.3

Peak table for sample 3 : 3 CASKIN1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	20	0.00	0.0		38.61
2	35	125.00	5,411.3	Lower Marker	43.00
3	88	27.86	480.4		49.66
4	122	555.26	6,902.8		53.15
5	142	1,710.37	18,194.6		55.13
6	206	58.92	433.8		61.17
7	218	34.27	238.2		62.31
8	225	26.94	181.3		62.97
9	244	89.16	552.7		64.76
10	260	41.16	240.1		66.18
11	288	11.03	58.1		68.77
12	298	10.69	54.3		69.76
13	309	11.57	56.7		70.66
14	319	9.50	45.1		71.46
15	330	4.76	21.9		72.31
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,521	0.00	0.0		115.12

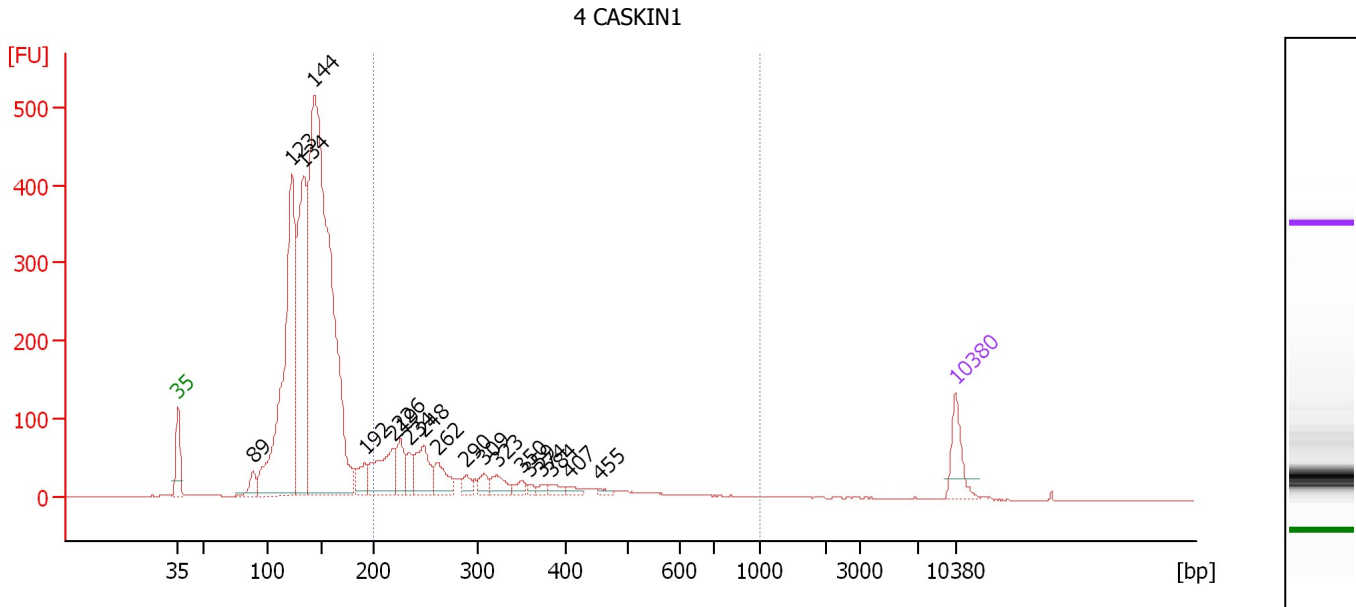
Region table for sample 3 : 3 CASKIN1

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	311	433.65	465.0	2,383.0	18	37.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 4 CASKIN1

Number of peaks found: 19 Corr. Area 1: 1,064.7
 Noise: 0.3

Peak table for sample 4 : 4 CASKIN1

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	89	54.76	933.6		49.77
3	123	1,211.80	14,904.9		53.27
4	134	862.85	9,746.5		54.33
5	144	2,524.36	26,544.5		55.29
6	192	69.69	550.6		59.85
7	219	204.13	1,409.2		62.44
8	226	91.75	616.0		63.02
9	234	54.68	353.3		63.84
10	248	145.45	887.0		65.13
11	262	91.76	530.9		66.38
12	290	30.96	161.9		68.97
13	309	37.38	183.5		70.61
14	323	50.18	235.7		71.71
15	350	24.33	105.2		73.92
16	359	11.29	47.6		74.64
17	374	15.15	61.4		75.79
18	384	21.66	85.4		76.61
19	407	17.89	66.6		78.24
20	455	10.60	35.3		80.98
21	10,380	75.00	10.9	Upper Marker	113.00

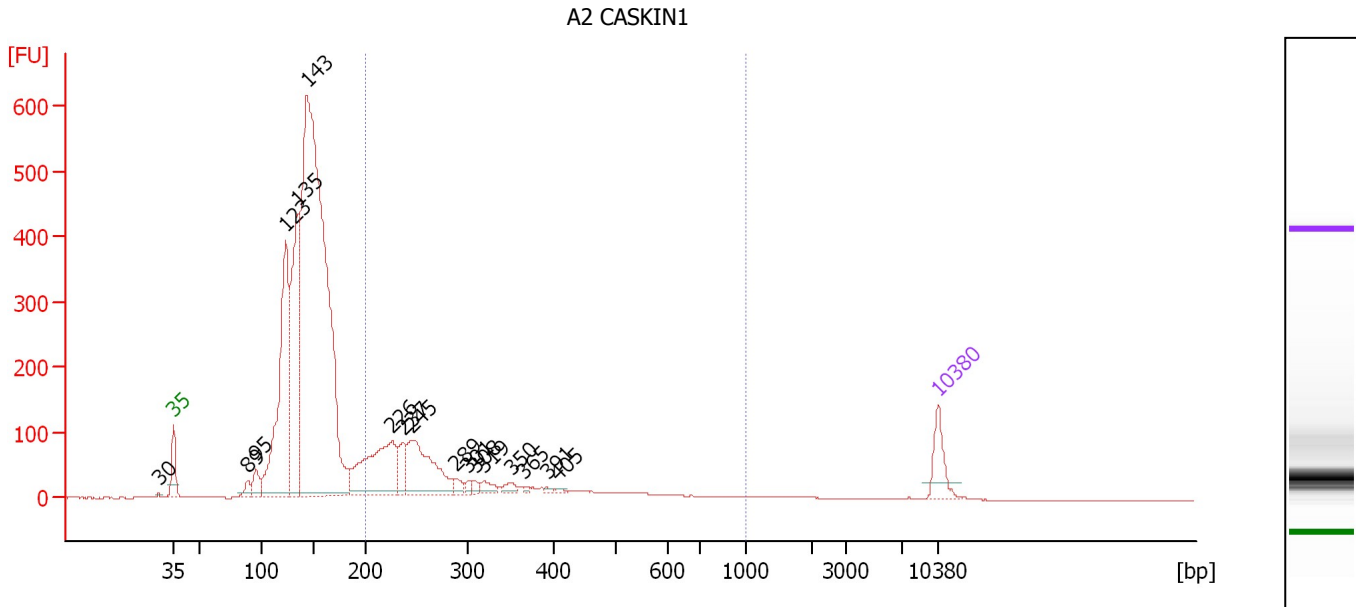
Region table for sample 4 : 4 CASKIN1

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	320	1,004.85	1,064.7	5,493.3	20	39.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : A2 CASKIN1

Number of peaks found: 17 Corr. Area 1: 1,349.4
 Noise: 0.3

Peak table for sample 5 : A2 CASKIN1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	30	0.00	0.0		41.63
2	35	125.00	5,411.3	Lower Marker	43.00
3	89	34.01	578.9		49.79
4	95	67.19	1,066.8		50.52
5	123	908.72	11,199.1		53.25
6	135	696.01	7,835.8		54.37
7	143	3,120.83	33,023.7		55.20
8	226	411.65	2,764.6		63.01
9	237	89.65	573.9		64.04
10	245	337.35	2,090.1		64.77
11	289	26.07	136.8		68.87
12	301	15.48	77.9		69.99
13	308	15.92	78.2		70.58
14	319	32.19	152.7		71.46
15	350	23.51	101.7		73.90
16	365	6.48	26.9		75.07
17	391	6.97	27.0		77.17
18	405	6.03	22.6		78.15
19	10,380	75.00	10.9	Upper Marker	113.00

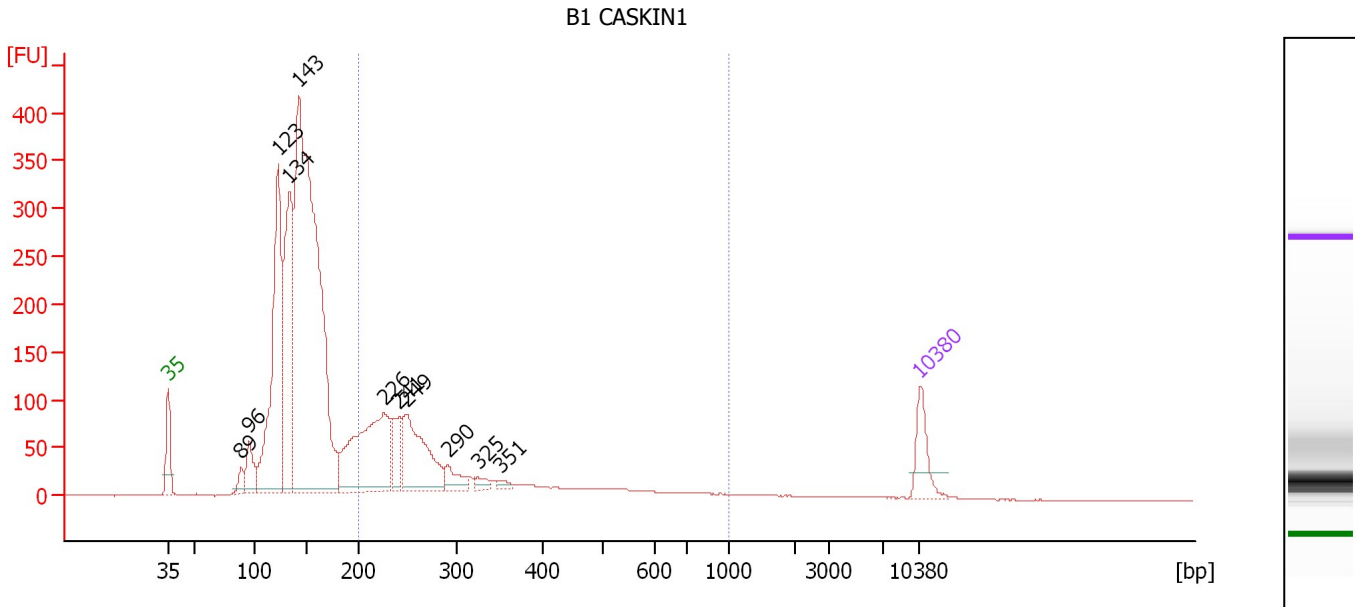
Region table for sample 5 : A2 CASKIN1

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	313	1,186.04	1,349.4	6,619.8	22	41.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : B1 CASKIN1

Number of peaks found: 11 Corr. Area 1: 1,288.0
 Noise: 0.3

Peak table for sample 6 : B1 CASKIN1

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	89	40.23	683.4		49.81
3	96	110.73	1,752.6		50.55
4	123	852.10	10,516.3		53.23
5	134	625.46	7,094.1		54.28
6	143	2,256.29	23,930.6		55.17
7	226	531.48	3,559.6		63.07
8	241	112.67	707.7		64.46
9	249	323.87	1,973.0		65.16
10	290	62.30	325.0		69.03
11	325	21.27	99.3		71.86
12	351	14.47	62.5		73.95
13	10,380	75.00	10.9	Upper Marker	113.00

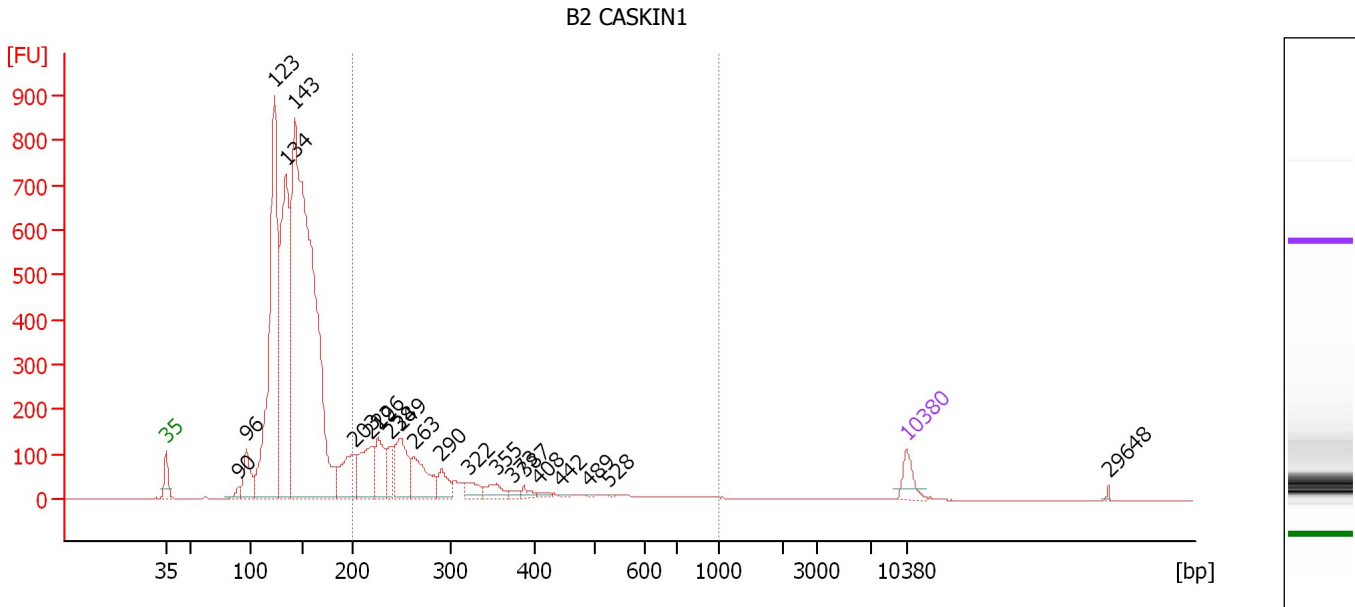
Region table for sample 6 : B1 CASKIN1

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	310	1,277.97	1,288.0	7,209.5	27	43.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : B2 CASKIN1

Number of peaks found: 21 Corr. Area 1: 1,907.0
 Noise: 0.3

Peak table for sample 7 : B2 CASKIN1

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	90	44.47	751.6		49.86
3	96	234.25	3,703.0		50.56
4	123	2,163.18	26,689.0		53.24
5	134	1,634.71	18,513.5		54.30
6	143	4,766.06	50,614.3		55.15
7	203	315.71	2,358.0		60.90
8	219	324.18	2,246.6		62.37
9	226	246.00	1,647.5		63.07
10	238	143.70	914.0		64.18
11	249	320.60	1,950.3		65.19
12	263	278.63	1,607.3		66.45
13	290	108.98	568.6		69.02
14	322	75.69	356.4		71.65
15	355	78.05	333.3		74.27
16	373	23.00	93.4		75.73
17	387	30.93	121.0		76.84
18	408	18.66	69.3		78.30
19	442	10.53	36.1		80.22
20	489	5.91	18.3		82.89
21	528	3.76	10.8		84.86
22	10,380	75.00	10.9	Upper Marker	113.00
23	29,648	0.00	0.0		132.11

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...

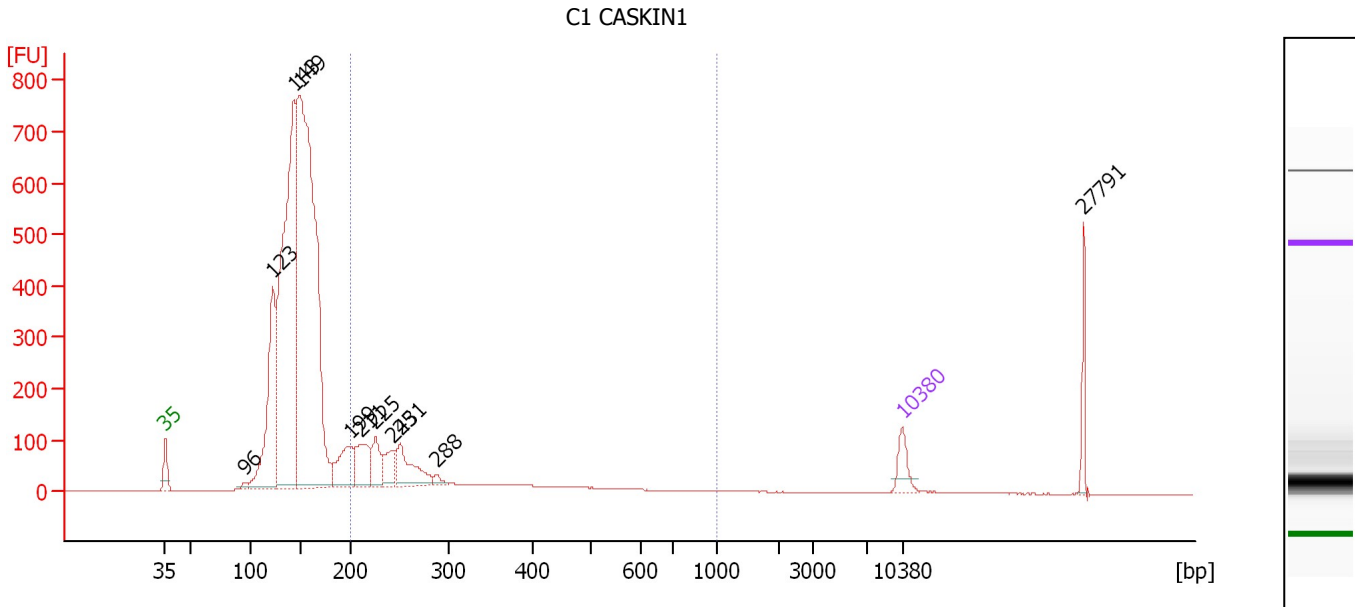
... Region table for sample 7 : B2 CASKIN1

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	302	2,058.64	1,907.0	11,652.7	 21	39.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : C1_CASKIN1

Number of peaks found: 11 Corr. Area 1: 1,287.4
 Noise: 0.3

Peak table for sample 8 : C1_CASKIN1

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	96	21.38	338.5		50.55
3	123	895.50	11,054.4		53.23
4	143	2,515.35	26,610.2		55.21
5	149	3,586.93	36,475.6		55.76
6	199	259.01	1,973.8		60.53
7	211	241.31	1,734.4		61.64
8	225	164.06	1,104.8		62.96
9	243	133.44	832.0		64.63
10	251	246.56	1,487.2		65.39
11	288	26.29	138.1		68.83
12	10,380	75.00	10.9	Upper Marker	113.00
13	27,791	0.00	0.0		130.27

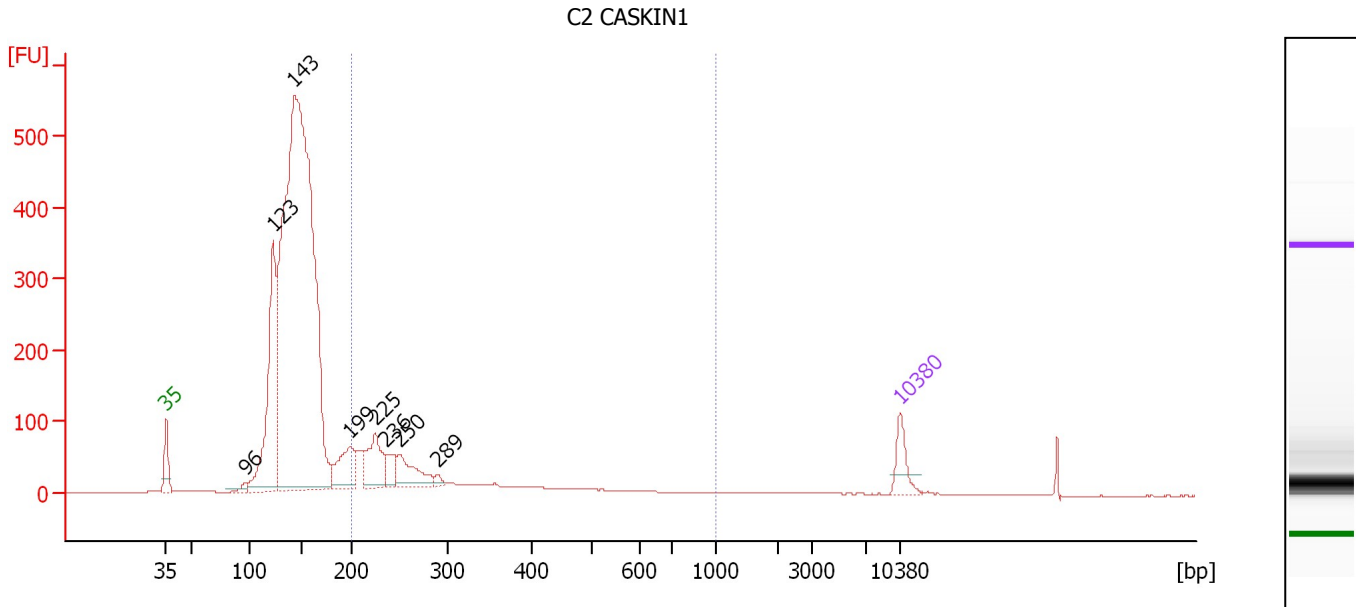
Region table for sample 8 : C1_CASKIN1

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	1,358.56	1,287.4	7,815.5	17	41.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : C2 CASKIN1

Number of peaks found: 8 Corr. Area 1: 905.7
 Noise: 0.3

Peak table for sample 9 : C2 CASKIN1

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	96	30.37	479.6		50.57
3	123	895.56	11,067.9		53.22
4	143	4,548.22	48,139.1		55.20
5	199	218.51	1,664.1		60.54
6	225	231.72	1,562.6		62.93
7	236	86.99	558.0		63.99
8	250	170.53	1,034.0		65.27
9	289	19.02	99.8		68.88
10	10,380	75.00	10.9	Upper Marker	113.00

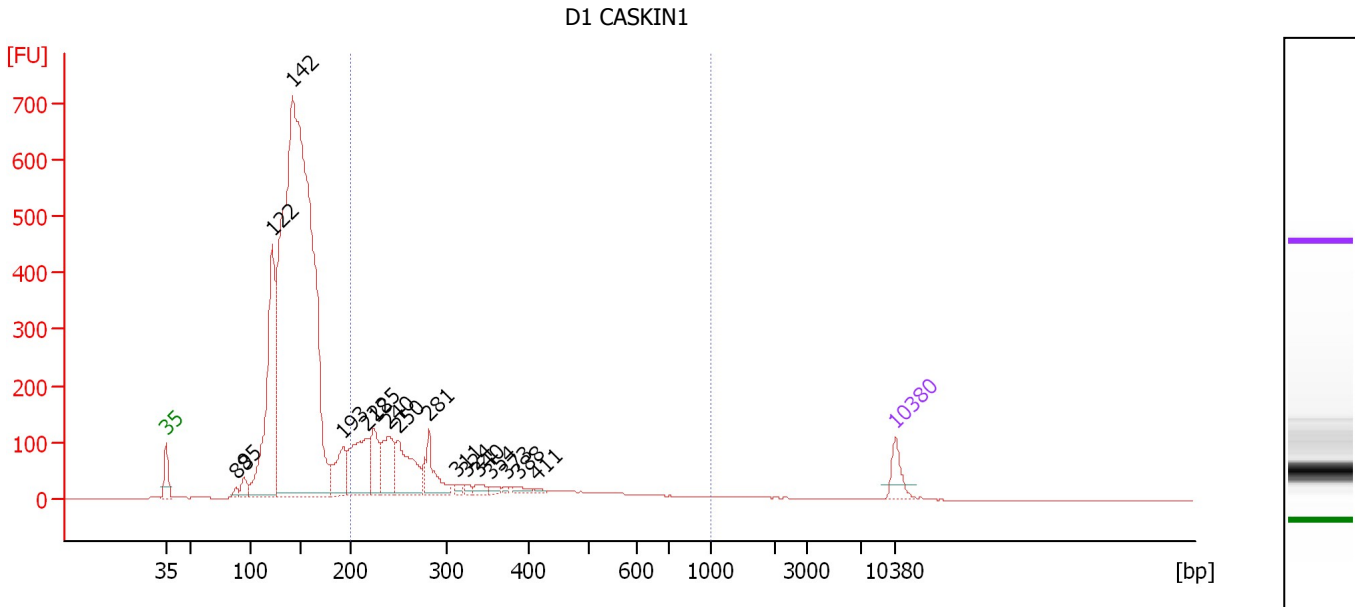
Region table for sample 9 : C2 CASKIN1

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	301	1,014.57	905.7	5,836.1	17	41.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

Created: 4/6/2018 2:06:40 PM
 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : D1 CASKIN1

Number of peaks found: 17 Corr. Area 1: 1,723.1
 Noise: 0.3

Peak table for sample 10 : D1 CASKIN1

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	88	27.30	468.3		49.71
3	95	70.13	1,117.8		50.48
4	122	1,221.11	15,126.7		53.19
5	142	6,059.99	64,440.3		55.14
6	193	240.95	1,888.3		60.00
7	218	404.41	2,811.2		62.31
8	225	204.77	1,381.4		62.92
9	240	268.82	1,696.8		64.35
10	250	323.94	1,963.4		65.28
11	281	164.28	884.4		68.19
12	311	18.83	91.7		70.81
13	324	18.06	84.4		71.83
14	340	33.07	147.6		73.06
15	354	23.32	99.9		74.19
16	373	10.83	44.0		75.72
17	388	26.30	102.7		76.90
18	411	10.37	38.2		78.49
19	10,380	75.00	10.9	Upper Marker	113.00

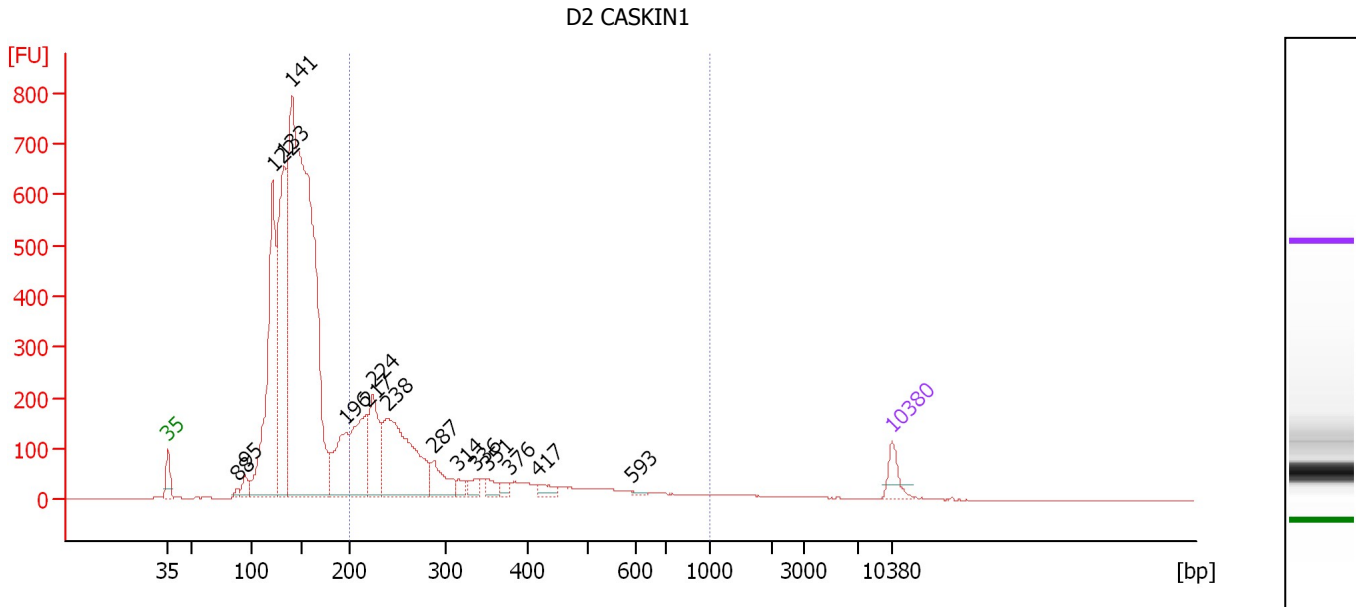
Region table for sample 10 : D1 CASKIN1

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	312	2,015.84	1,723.1	11,301.6	24	42.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

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 Modified: 4/10/2018 12:48:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : D2 CASKIN1

Number of peaks found: 16 Corr. Area 1: 2,625.3
 Noise: 0.3

Peak table for sample 11 : D2 CASKIN1

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	88	28.38	487.1		49.70
3	95	84.62	1,348.8		50.47
4	122	1,565.13	19,446.7		53.15
5	133	1,466.32	16,683.7		54.24
6	141	5,155.71	55,330.6		55.01
7	196	424.14	3,276.6		60.27
8	217	505.18	3,525.2		62.23
9	224	412.55	2,793.1		62.85
10	238	954.76	6,072.1		64.19
11	287	184.15	971.8		68.72
12	314	42.28	203.9		71.04
13	336	55.60	250.6		72.79
14	351	55.95	241.4		73.98
15	376	33.70	135.6		75.99
16	417	48.10	174.7		78.82
17	593	10.81	27.6		87.90
18	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : D2 CASKIN1

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	320	2,887.47	2,625.3	16,057.7	28	43.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-06\2018-04-06_003.xad

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Modified: 4/10/2018 12:48:46 PM

Gel Image

