

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-31\2019-07-31_003.xad

Created: 7/31/2019 3:09:59 PM
Modified: 7/31/2019 3:52:06 PM

Electrophoresis File Run Summary

Instrument Information:

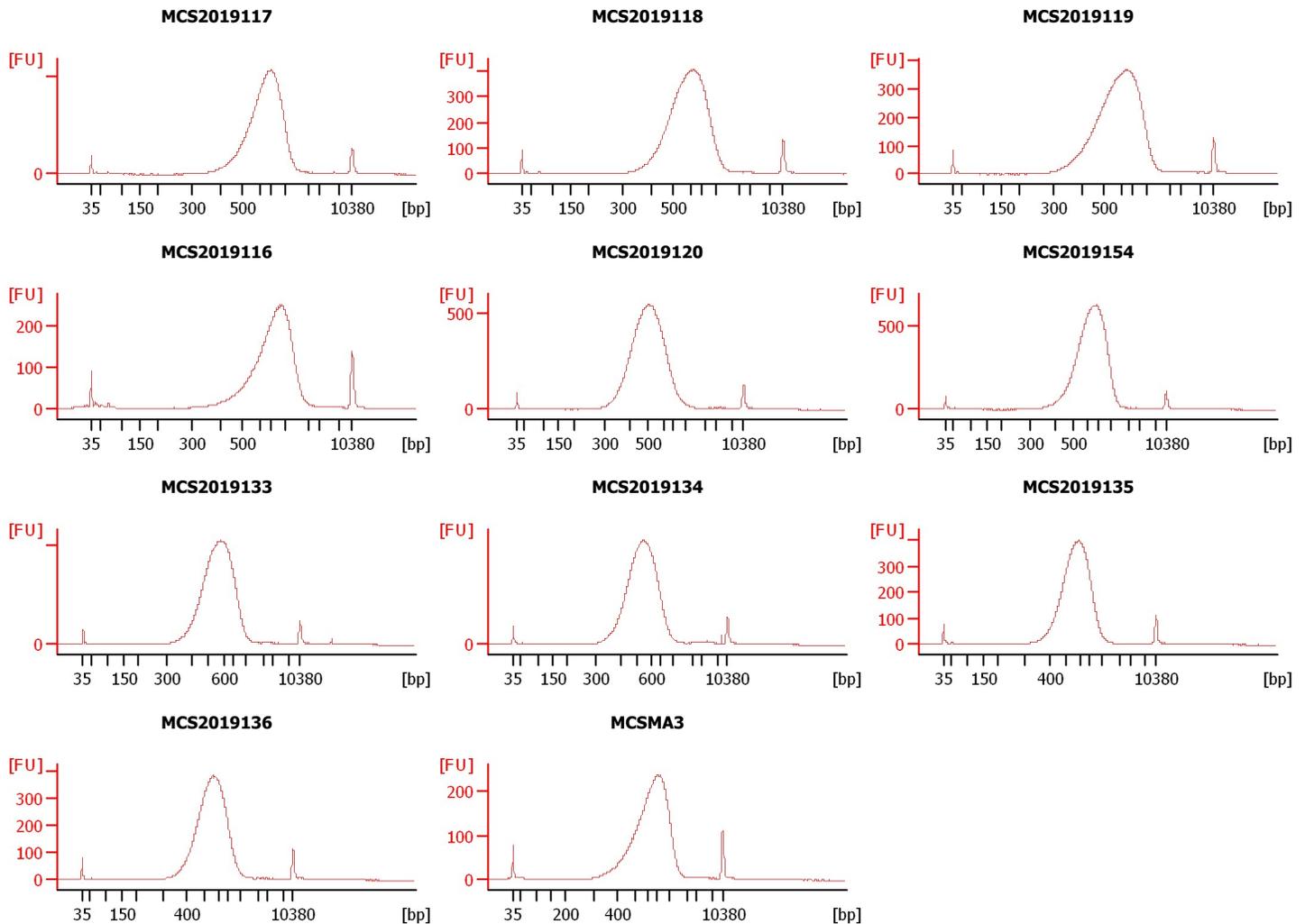
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:



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Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
MCS2019117		<input type="checkbox"/>	✓			
MCS2019118		<input type="checkbox"/>	✓			
MCS2019119		<input type="checkbox"/>	✓			
MCS2019116		<input type="checkbox"/>	✓			
MCS2019120		<input type="checkbox"/>	✓			
MCS2019154		<input type="checkbox"/>	✓			
MCS2019133		<input type="checkbox"/>	✓			
MCS2019134		<input type="checkbox"/>	✓			
MCS2019135		<input type="checkbox"/>	✓			
MCS2019136		<input type="checkbox"/>	✓			
MCSMA3		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

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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

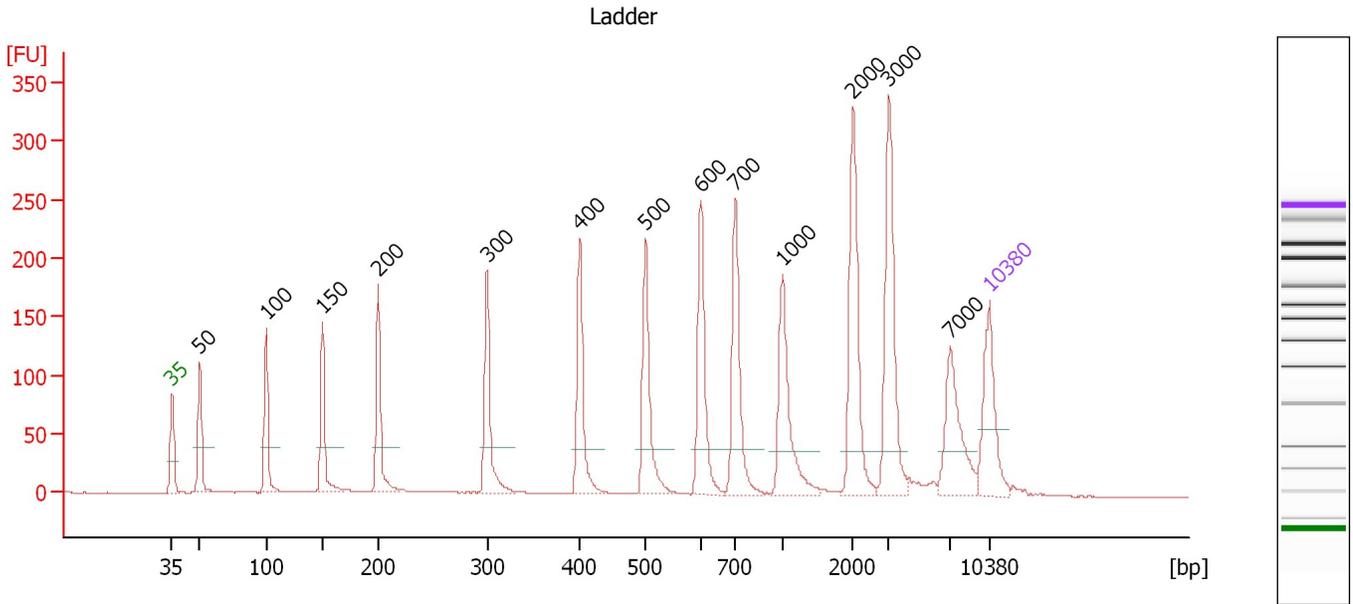
Ladder

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

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Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

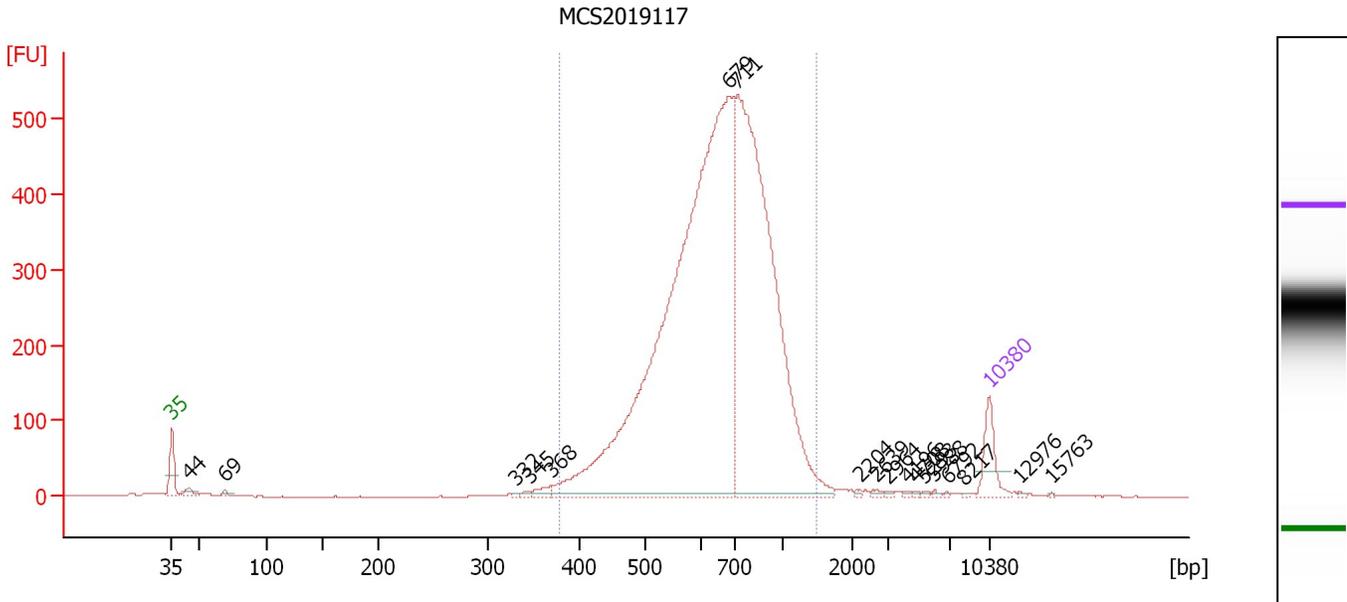
Peak table for Ladder

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	45.38
3	100	150.00	2,272.7	Ladder Peak	51.08
4	150	150.00	1,515.2	Ladder Peak	55.89
5	200	150.00	1,136.4	Ladder Peak	60.65
6	300	150.00	757.6	Ladder Peak	69.99
7	400	150.00	568.2	Ladder Peak	77.93
8	500	150.00	454.5	Ladder Peak	83.53
9	600	150.00	378.8	Ladder Peak	88.30
10	700	150.00	324.7	Ladder Peak	91.24
11	1,000	150.00	227.3	Ladder Peak	95.30
12	2,000	150.00	113.6	Ladder Peak	101.33
13	3,000	150.00	75.8	Ladder Peak	104.41
14	7,000	150.00	32.5	Ladder Peak	109.64
15	10,380	75.00	10.9	Upper Marker	113.00

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Electropherogram Summary Continued ...



Overall Results for sample 1 : MCS2019117

Number of peaks found: 18 Corr. Area 1: 6,042.0
 Noise: 0.3

Peak table for sample 1 : MCS2019117

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	44	27.53	940.9		44.48
3	69	11.93	263.7		47.49
4	332	4.02	18.4		72.50
5	345	8.40	36.9		73.60
6	368	22.93	94.3		75.42
7	679	2,913.19	6,500.0		90.62
8	711	1,808.44	3,853.7		91.39
9	2,204	3.59	2.5		101.95
10	2,639	6.29	3.6		103.29
11	2,964	3.72	1.9		104.30
12	4,196	3.72	1.3		105.97
13	4,708	2.82	0.9		106.64
14	5,293	3.61	1.0		107.41
15	5,988	3.92	1.0		108.31
16	6,792	2.37	0.5		109.37
17	8,217	2.08	0.4		110.85
18	10,380	75.00	10.9	Upper Marker	113.00
19	12,976	0.00	0.0		115.58
20	15,763	0.00	0.0		118.36

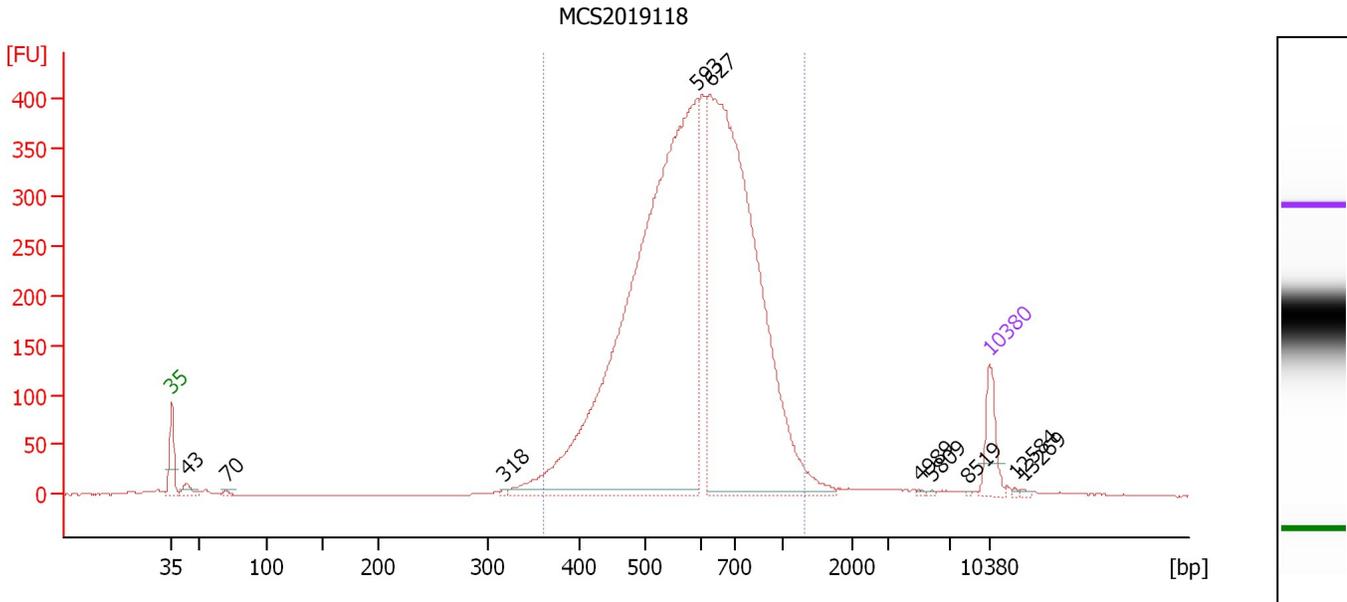
Region table for sample 1 : MCS2019117

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
378	1,470	693	4,672.48	6,042.0	10,988.6	96	25.5

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Electropherogram Summary Continued ...



Overall Results for sample 2 : MCS2019118

Number of peaks found: 10 Corr. Area 1: 5,641.8
 Noise: 0.4

Peak table for sample 2 : MCS2019118

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	43	34.58	1,219.1		44.27
3	70	7.08	153.8		47.63
4	318	4.79	22.8		71.45
5	593	2,407.80	6,152.4		87.96
6	627	1,854.58	4,483.8		89.08
7	4,989	2.81	0.9		107.01
8	5,809	2.62	0.7		108.08
9	8,519	1.72	0.3		111.15
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,584	0.00	0.0		115.19
12	13,269	0.00	0.0		115.87

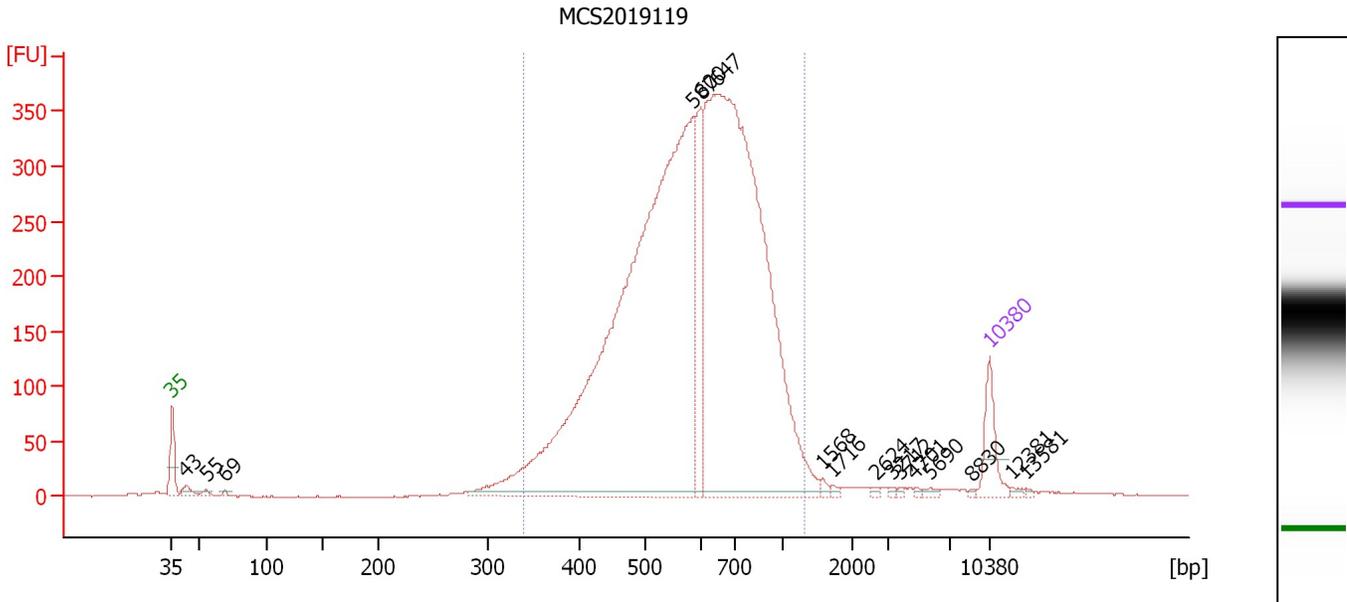
Region table for sample 2 : MCS2019118

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
361	1,310	618	4,670.03	5,641.8	12,238.1	95	24.3

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Electropherogram Summary Continued ...



Overall Results for sample 3 : MCS2019119

Number of peaks found: 16 Corr. Area 1: 5,674.4
 Noise: 0.4

Peak table for sample 3 : MCS2019119

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	43	30.94	1,102.3		44.19
3	55	12.33	340.6		45.94
4	69	7.53	165.7		47.53
5	587	2,459.58	6,348.8		87.68
6	600	253.51	640.7		88.27
7	647	2,139.27	5,013.2		89.67
8	1,568	9.15	8.8		98.72
9	1,716	5.55	4.9		99.62
10	2,624	4.38	2.5		103.25
11	3,217	3.85	1.8		104.69
12	3,712	3.49	1.4		105.34
13	4,701	3.23	1.0		106.63
14	5,690	7.04	1.9		107.93
15	8,830	2.69	0.5		111.46
16	10,380	75.00	10.9	Upper Marker	113.00
17	12,381	0.00	0.0		114.99
18	13,581	0.00	0.0		116.18

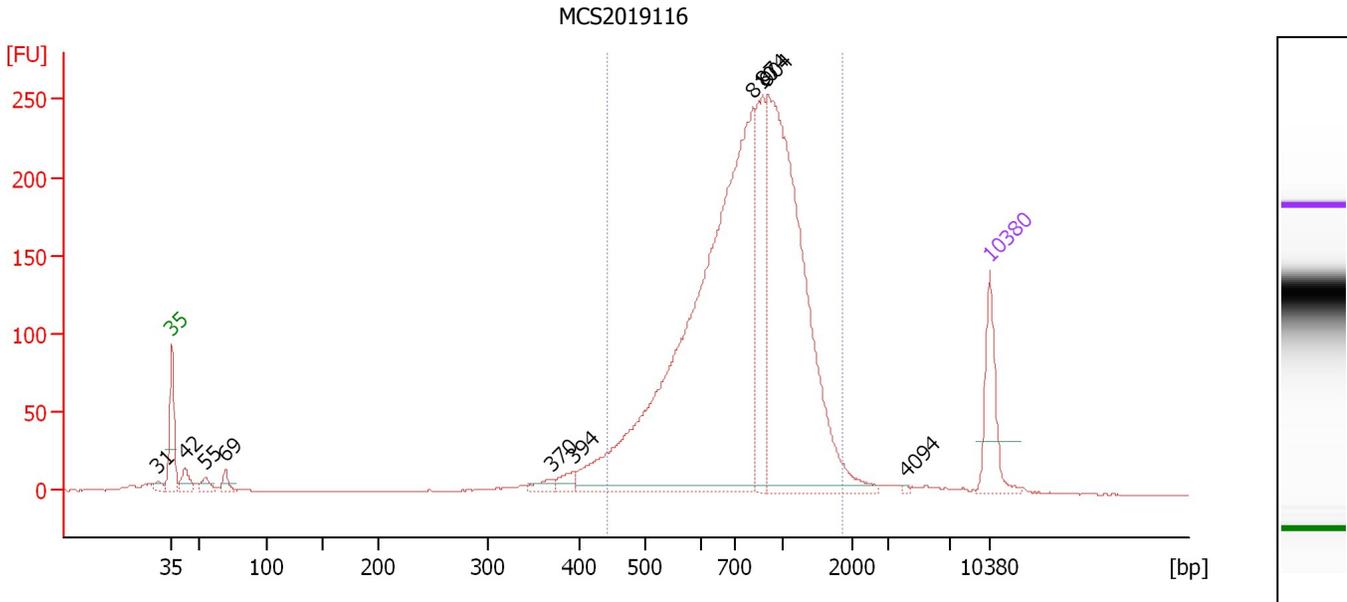
Region table for sample 3 : MCS2019119

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
339	1,320	621	4,990.18	5,674.4	13,274.7	94	26.9

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Electropherogram Summary Continued ...



Overall Results for sample 4 : MCS2019116

Number of peaks found: 10 Corr. Area 1: 2,876.0
 Noise: 0.3

Peak table for sample 4 : MCS2019116

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	31	0.00	0.0		41.78
2	35	125.00	5,411.3	Lower Marker	43.00
3	42	34.05	1,227.1		44.12
4	55	19.06	529.8		45.90
5	69	19.07	417.3		47.57
6	370	15.04	61.7		75.51
7	394	19.00	73.1		77.44
8	810	1,194.02	2,232.9		92.73
9	874	167.45	290.3		93.60
10	904	731.81	1,226.6		94.00
11	4,094	2.02	0.7		105.84
12	10,380	75.00	10.9	Upper Marker	113.00

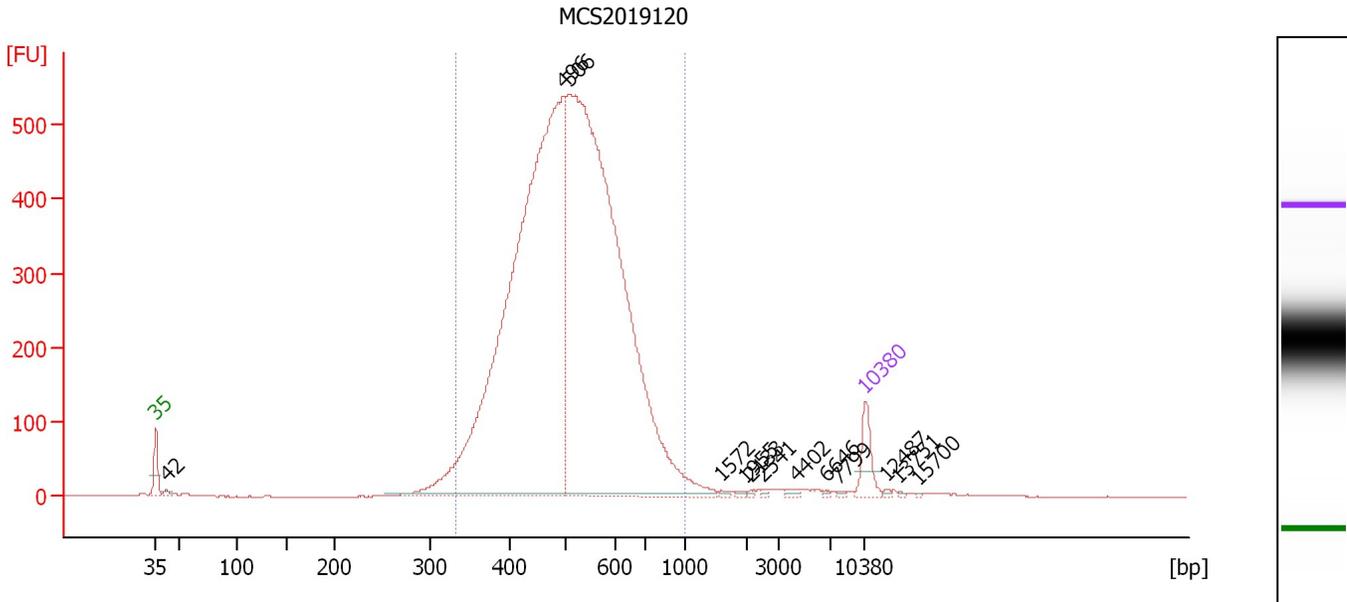
Region table for sample 4 : MCS2019116

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
442	1,845	843	2,100.82	2,876.0	4,265.3	89	33.7

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Electropherogram Summary Continued ...



Overall Results for sample 5 : MCS2019120

Number of peaks found: 13 Corr. Area 1: 7,927.3
 Noise: 0.3

Peak table for sample 5 : MCS2019120

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	42	15.12	550.8		44.05
3	496	3,297.61	10,079.7		83.29
4	506	3,417.10	10,233.6		83.82
5	1,572	5.81	5.6		98.75
6	1,955	5.26	4.1		101.05
7	2,133	3.81	2.7		101.74
8	2,541	4.35	2.6		102.99
9	4,402	8.69	3.0		106.24
10	6,646	4.24	1.0		109.18
11	7,799	3.88	0.8		110.43
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,487	0.00	0.0		115.10
14	13,751	0.00	0.0		116.35
15	15,700	0.00	0.0		118.29

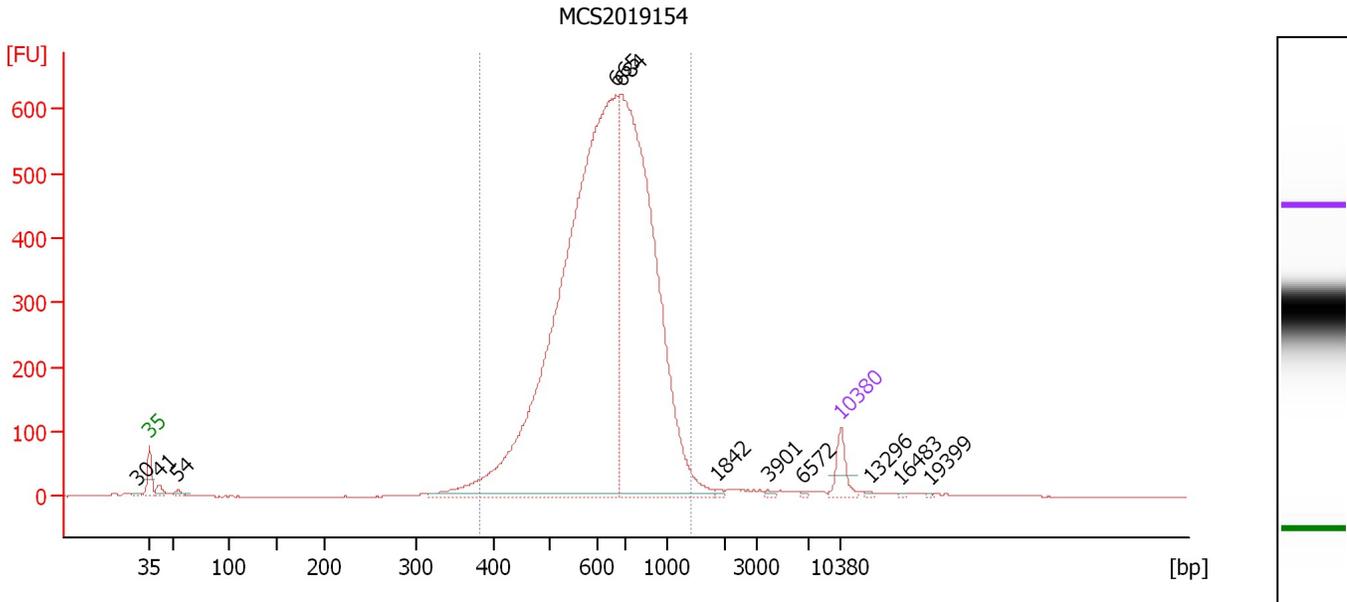
Region table for sample 5 : MCS2019120

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
332	1,000	515	6,502.76	7,927.3	20,078.6	95	20.0

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Electropherogram Summary Continued ...



Overall Results for sample 6 : MCS2019154

Number of peaks found: 11 Corr. Area 1: 7,518.0
 Noise: 0.2

Peak table for sample 6 : MCS2019154

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	30	0.00	0.0		41.66
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	46.75	1,738.0		43.91
4	54	28.25	791.5		45.85
5	665	4,206.93	9,579.0		90.22
6	684	2,757.16	6,110.2		90.76
7	1,842	6.62	5.4		100.38
8	3,901	8.36	3.2		105.59
9	6,572	5.77	1.3		109.08
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,296	0.00	0.0		115.90
12	16,483	0.00	0.0		119.07
13	19,399	0.00	0.0		121.97

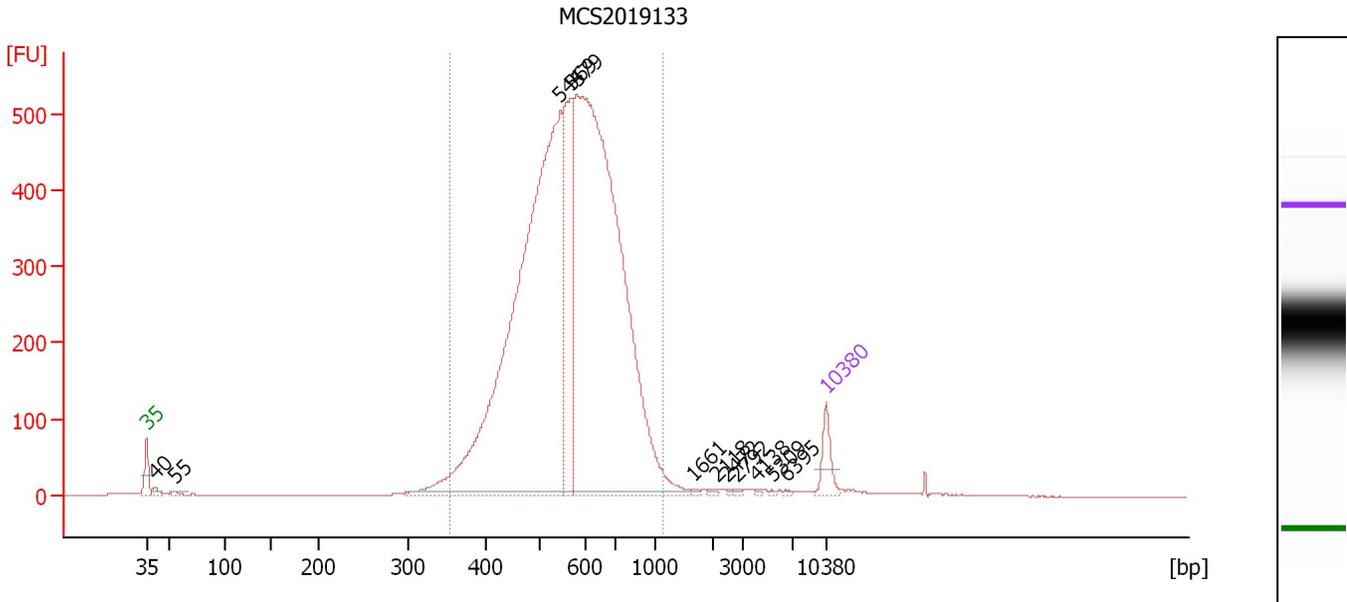
Region table for sample 6 : MCS2019154

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
380	1,419	674	6,904.37	7,518.0	16,646.2	95	25.2

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Electropherogram Summary Continued ...



Overall Results for sample 7 : MCS2019133

Number of peaks found: 12 Corr. Area 1: 7,148.4
 Noise: 0.3

Peak table for sample 7 : MCS2019133

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	40	31.08	1,172.5		43.82
3	55	21.21	589.4		45.90
4	544	3,179.18	8,856.9		85.62
5	569	624.45	1,662.5		86.83
6	579	3,223.40	8,428.9		87.32
7	1,661	5.23	4.8		99.28
8	2,118	7.49	5.4		101.69
9	2,472	3.67	2.3		102.78
10	2,792	4.86	2.6		103.77
11	4,138	4.35	1.6		105.90
12	5,309	3.05	0.9		107.43
13	6,395	3.88	0.9		108.85
14	10,380	75.00	10.9	Upper Marker	113.00

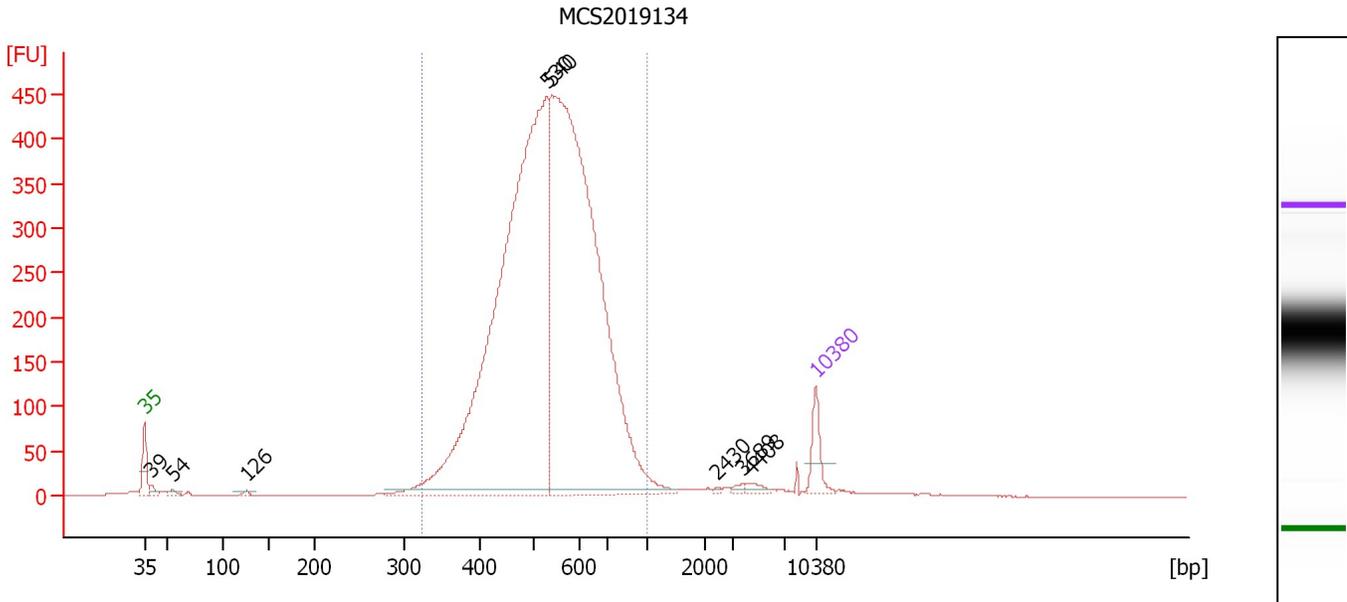
Region table for sample 7 : MCS2019133

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
354	1,137	584	7,083.40	7,148.4	19,411.4	95	21.4

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Electropherogram Summary Continued ...



Overall Results for sample 8 : MCS2019134

Number of peaks found: 8 Corr. Area 1: 6,119.2
 Noise: 0.2

Peak table for sample 8 : MCS2019134

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	39	25.57	988.9		43.66
3	54	18.91	527.2		45.88
4	126	13.20	158.1		53.62
5	530	3,063.76	8,764.8		84.94
6	540	3,019.90	8,472.1		85.44
7	2,430	3.62	2.3		102.65
8	3,689	9.69	4.0		105.31
9	4,408	19.09	6.6		106.25
10	10,380	75.00	10.9	Upper Marker	113.00

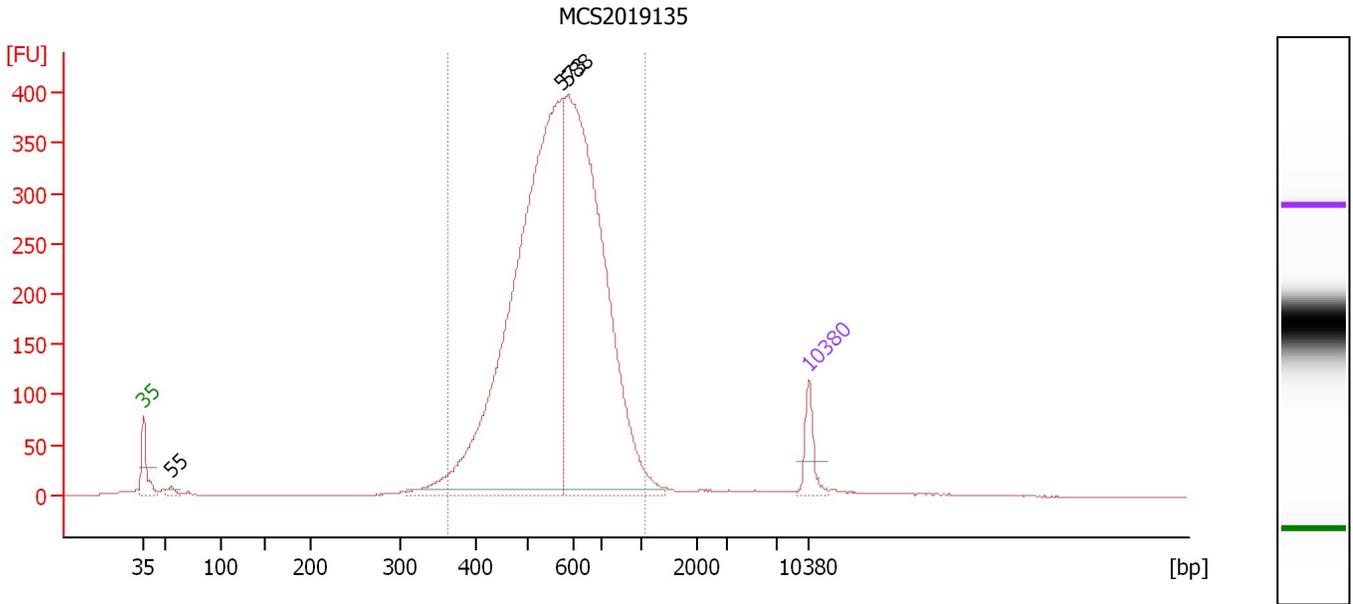
Region table for sample 8 : MCS2019134

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
324	1,000	544	6,133.79	6,119.2	17,910.3	95	19.7

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Electropherogram Summary Continued ...



Overall Results for sample 9 : MCS2019135

Number of peaks found: 3 Corr. Area 1: 4,884.6
 Noise: 0.3

Peak table for sample 9 : MCS2019135

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	55	25.15	692.1		45.96
3	573	2,517.40	6,662.4		86.99
4	588	1,979.20	5,102.2		87.71
5	10,380	75.00	10.9	Upper Marker	113.00

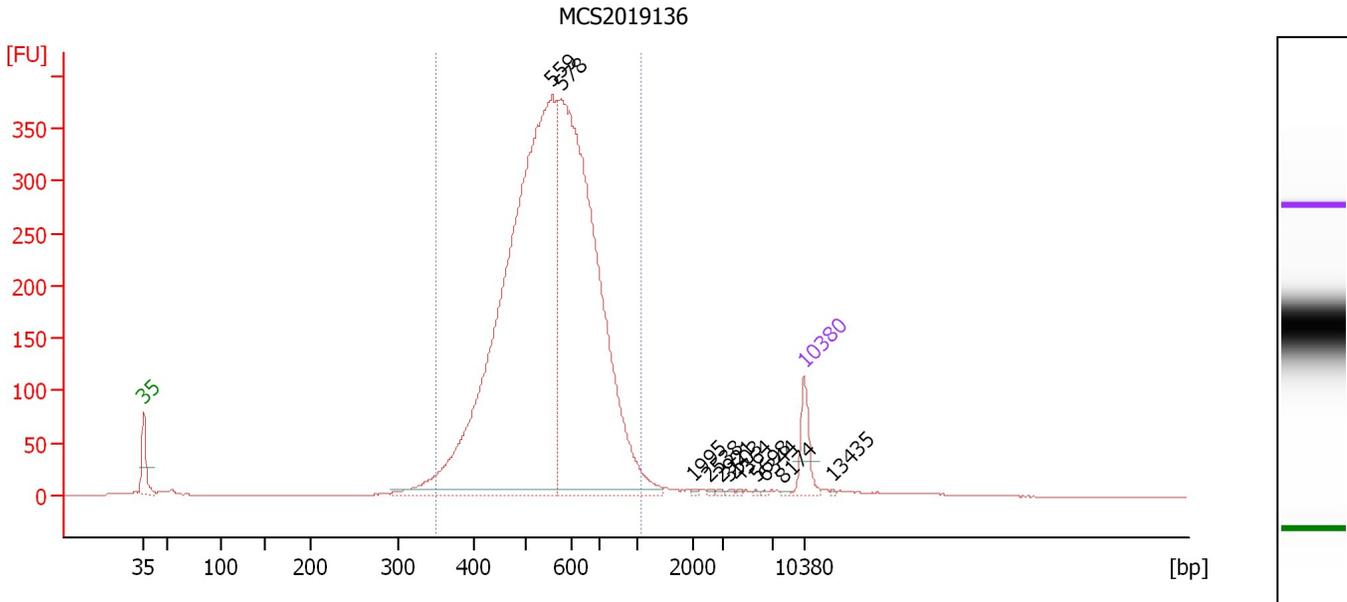
Region table for sample 9 : MCS2019135

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
363	1,097	583	4,626.25	4,884.6	12,590.3	94	19.9

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Electropherogram Summary Continued ...



Overall Results for sample 10 : MCS2019136

Number of peaks found: 11 Corr. Area 1: 4,918.1
 Noise: 0.2

Peak table for sample 10 : MCS2019136

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	559	2,547.65	6,909.5		86.33
3	578	1,973.65	5,177.5		87.23
4	1,995	3.34	2.5		101.30
5	2,538	2.87	1.7		102.98
6	2,921	4.18	2.2		104.17
7	3,503	3.76	1.6		105.07
8	4,364	2.99	1.0		106.19
9	5,698	2.75	0.7		107.94
10	6,344	2.71	0.6		108.78
11	8,174	3.28	0.6		110.81
12	10,380	75.00	10.9	Upper Marker	113.00
13	13,435	0.00	0.0		116.04

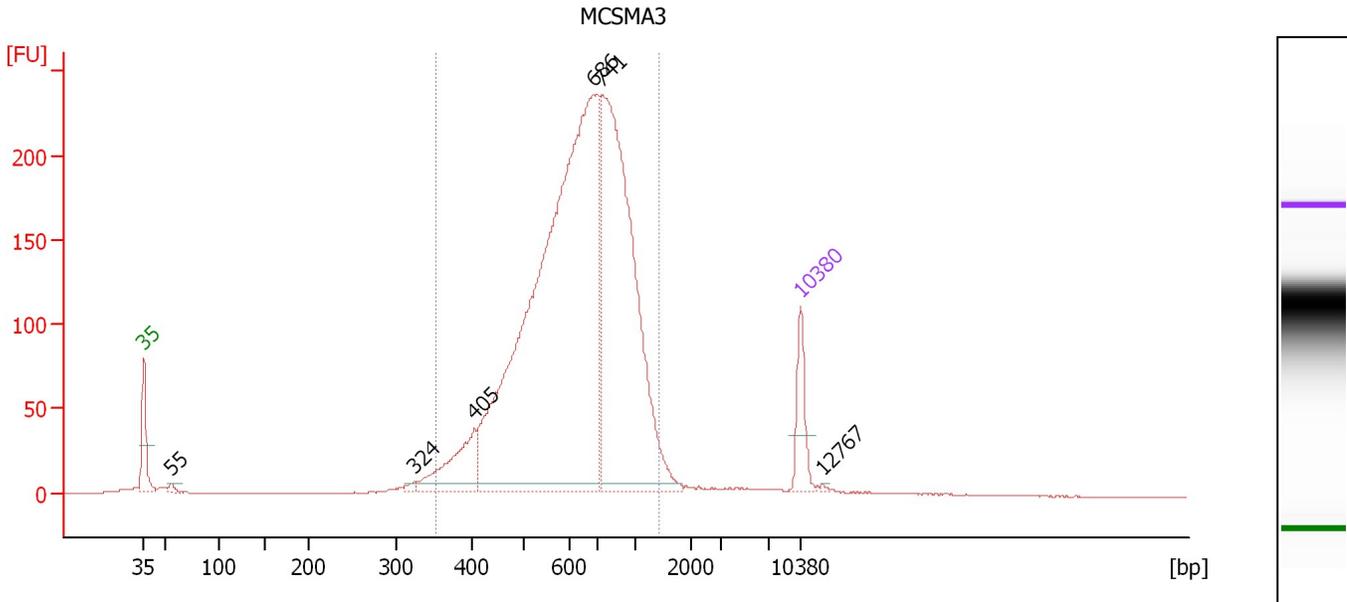
Region table for sample 10 : MCS2019136

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
350	1,069	568	4,622.91	4,918.1	12,943.6	94	20.3

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Electropherogram Summary Continued ...



Overall Results for sample 11 : MCSMA3

Number of peaks found: 6 Corr. Area 1: 3,149.1
 Noise: 0.2

Peak table for sample 11 : MCSMA3

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	55	14.91	407.8		46.00
3	324	11.26	52.7		71.89
4	405	167.76	627.2		78.23
5	686	1,971.74	4,353.2		90.84
6	741	1,061.92	2,170.8		91.80
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,767	0.00	0.0		115.37

Region table for sample 11 : MCSMA3

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
352	1,444	687	3,241.20	3,149.1	7,906.5	94	29.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-31\2019-07-31_003.xad

Created: 7/31/2019 3:09:59 PM
Modified: 7/31/2019 3:52:06 PM

Gel Image

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-07-31\2019-07-31_003.xad

Created: 7/31/2019 3:09:59 PM
 Modified: 7/31/2019 3:52:06 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		7/31/2019 3:50:22 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\2019-07-31\2019-07-31_003.xad)		Instrument	Run		7/31/2019 3:09:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		7/31/2019 3:09:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/31/2019 3:09:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/31/2019 3:09:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		7/31/2019 3:09:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/31/2019 3:09:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/31/2019 3:09:59 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1