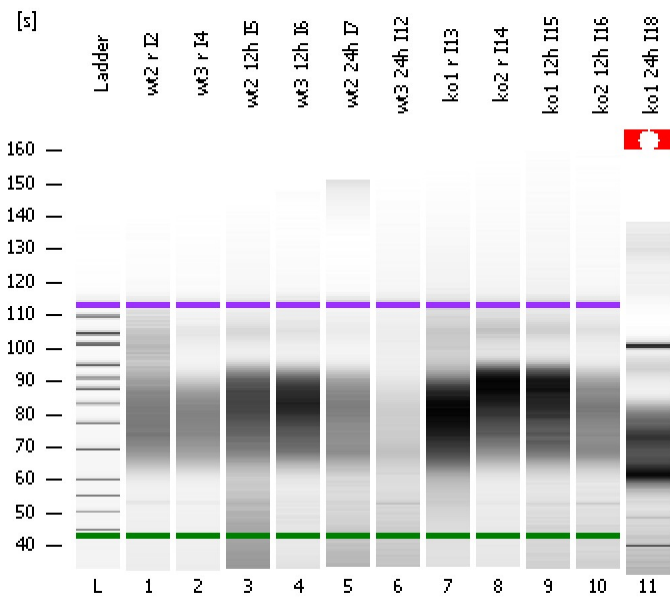


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
Modified: 3/16/2018 4:04:44 PM

Electrophoresis File Run Summary



Instrument Information:

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

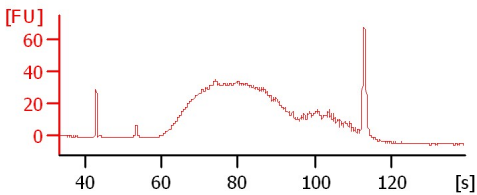
Assay Information:

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

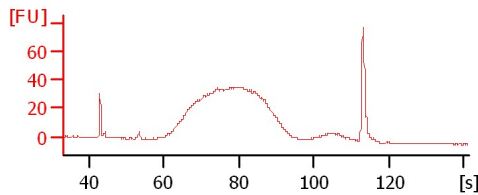
Chip Information:

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

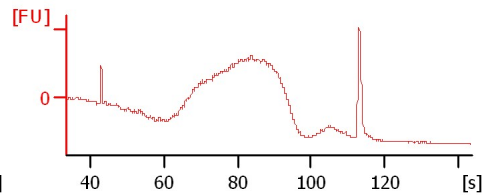
wt2 r I2



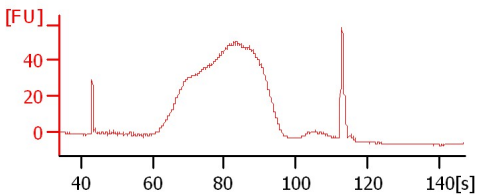
wt3 r I4



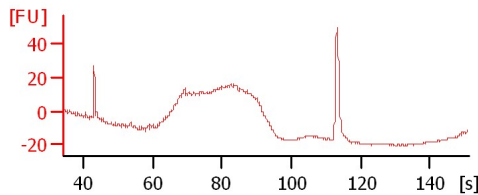
wt2 12h I5



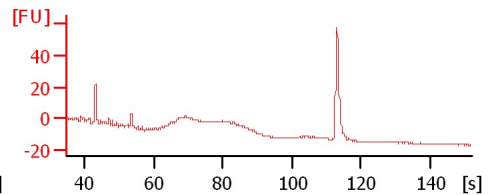
wt3 12h I6



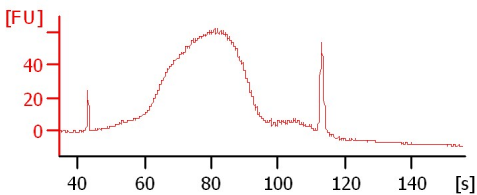
wt2 24h I7



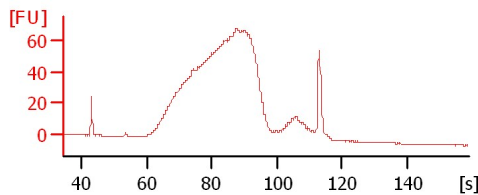
wt3 24h I12



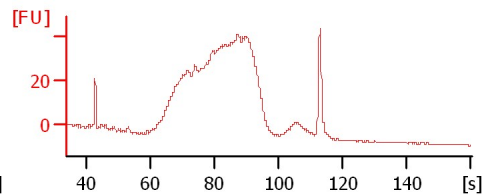
ko1 r I13



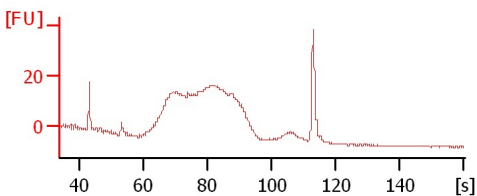
ko2 r I14



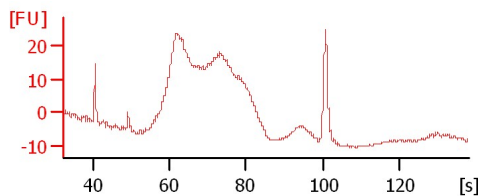
ko1 12h I15



ko2 12h I16



ko1 24h I18



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
Modified: 3/16/2018 4:04:44 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
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wt3 r I4		<input type="checkbox"/>	✓			
wt2 12h I5		<input type="checkbox"/>	✓			
wt3 12h I6		<input type="checkbox"/>	✓			
wt2 24h I7		<input type="checkbox"/>	✓			
wt3 24h I12		<input type="checkbox"/>	✓			
ko1 r I13		<input type="checkbox"/>	✓			
ko2 r I14		<input type="checkbox"/>	✓			
ko1 12h I15		<input type="checkbox"/>	✓			
ko2 12h I16		<input type="checkbox"/>	✓			
ko1 24h I18		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

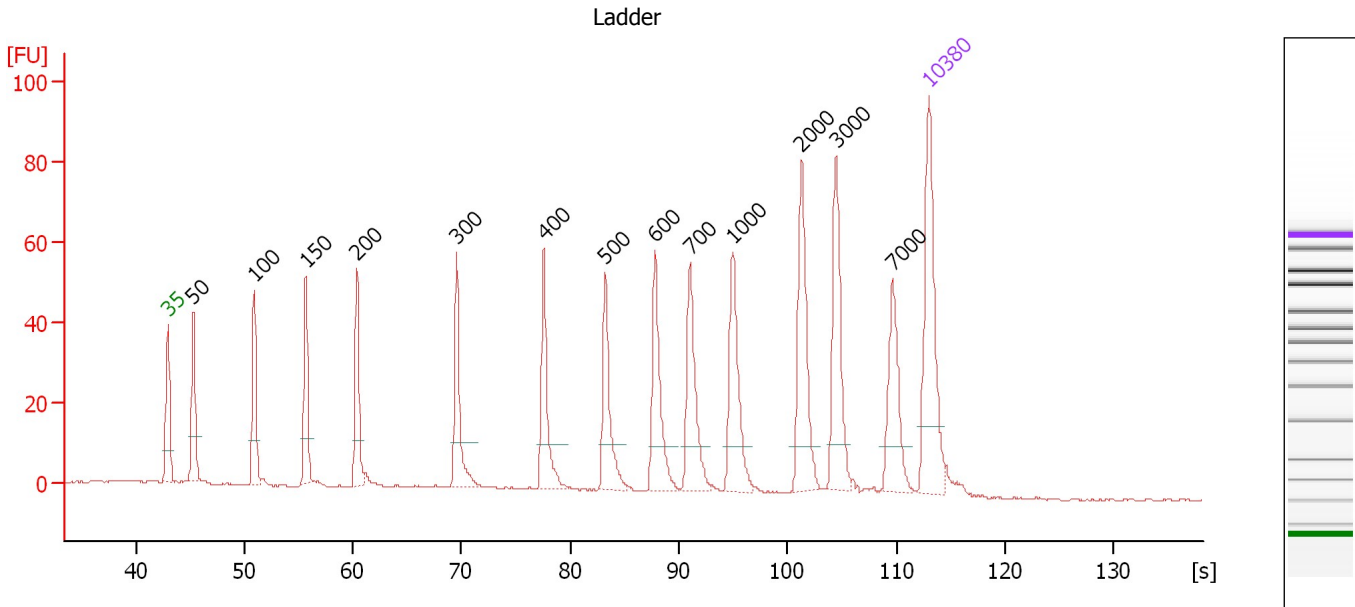
Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

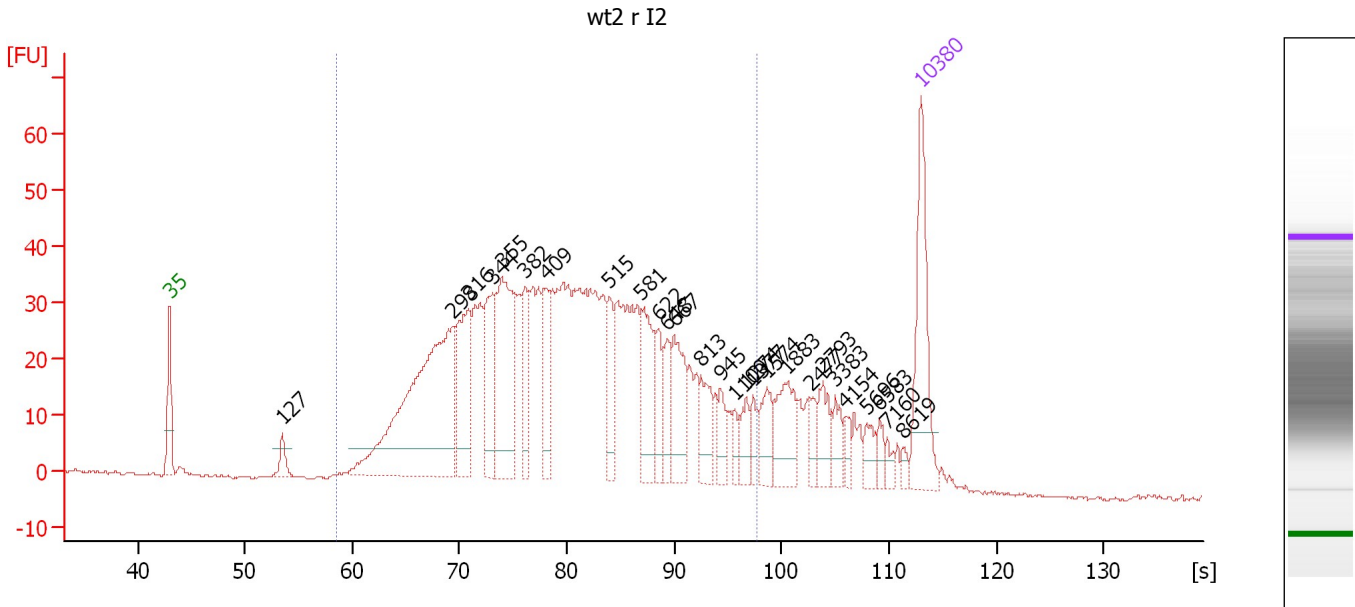
Peak table for Ladder

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	45.32
3	100	150.00	2,272.7	Ladder Peak	50.95
4	150	150.00	1,515.2	Ladder Peak	55.70
5	200	150.00	1,136.4	Ladder Peak	60.39
6	300	150.00	757.6	Ladder Peak	69.58
7	400	150.00	568.2	Ladder Peak	77.58
8	500	150.00	454.5	Ladder Peak	83.21
9	600	150.00	378.8	Ladder Peak	87.81
10	700	150.00	324.7	Ladder Peak	91.02
11	1,000	150.00	227.3	Ladder Peak	94.97
12	2,000	150.00	113.6	Ladder Peak	101.29
13	3,000	150.00	75.8	Ladder Peak	104.45
14	7,000	150.00	32.5	Ladder Peak	109.64
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : wt2 r I2

Number of peaks found: 27 Corr. Area 1: 1,192.5
 Noise: 0.3

Peak table for sample 1 : wt2 r I2

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	127	17.92	214.1		53.50
3	298	319.62	1,627.6		69.35
4	316	97.83	469.2		70.85
5	344	74.14	326.5		73.10
6	355	135.45	578.7		73.95
7	382	47.72	189.5		76.10
8	409	49.04	181.6		78.10
9	515	39.48	116.2		83.90
10	581	60.17	156.8		86.95
11	622	30.38	74.1		88.50
12	648	25.28	59.1		89.35
13	667	55.57	126.3		89.95
14	813	33.32	62.1		92.50
15	945	18.69	30.0		94.25
16	1,100	10.66	14.7		95.60
17	1,274	16.97	20.2		96.70
18	1,377	12.35	13.6		97.35
19	1,574	25.67	24.7		98.60
20	1,883	40.71	32.8		100.55
21	2,477	10.99	6.7		102.80
22	2,793	23.96	13.0		103.80
23	3,383	15.95	7.1		104.95
24	4,154	8.95	3.3		105.95
25	5,696	13.74	3.7		107.95

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : wt2 r I2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	6,583	9.04	2.1		109.10
27	7,160	6.18	1.3		109.80
28	8,619	5.10	0.9		111.25
29	10,380	75.00	10.9	Upper Marker	113.00

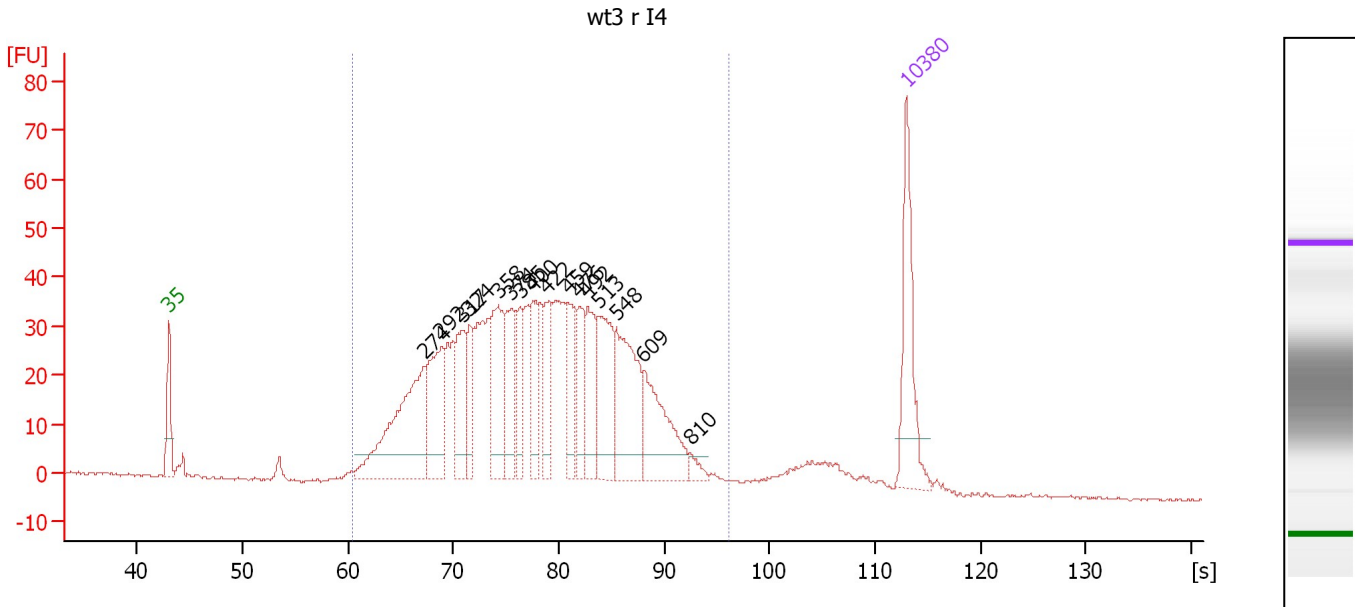
Region table for sample 1 : wt2 r I2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
180	1,420	489	1,192.5	1,813.80	6,963.9	85	45.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : wt3 r I4

Number of peaks found: 16 Corr. Area 1: 1,089.7
 Noise: 0.3

Peak table for sample 2 : wt3 r I4

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	274	192.91	1,066.3		67.20
3	292	101.43	525.5		68.88
4	317	68.49	327.6		70.92
5	324	45.28	211.5		71.53
6	358	100.64	425.8		74.23
7	374	62.69	253.9		75.50
8	385	44.57	175.5		76.37
9	400	54.97	208.1		77.59
10	422	44.04	158.1		78.82
11	459	52.12	172.0		80.90
12	476	47.21	150.2		81.87
13	492	60.85	187.5		82.74
14	513	92.73	273.9		83.81
15	548	115.97	320.4		85.44
16	609	89.72	223.3		88.09
17	810	8.69	16.2		92.47
18	10,380	75.00	10.9	Upper Marker	113.00

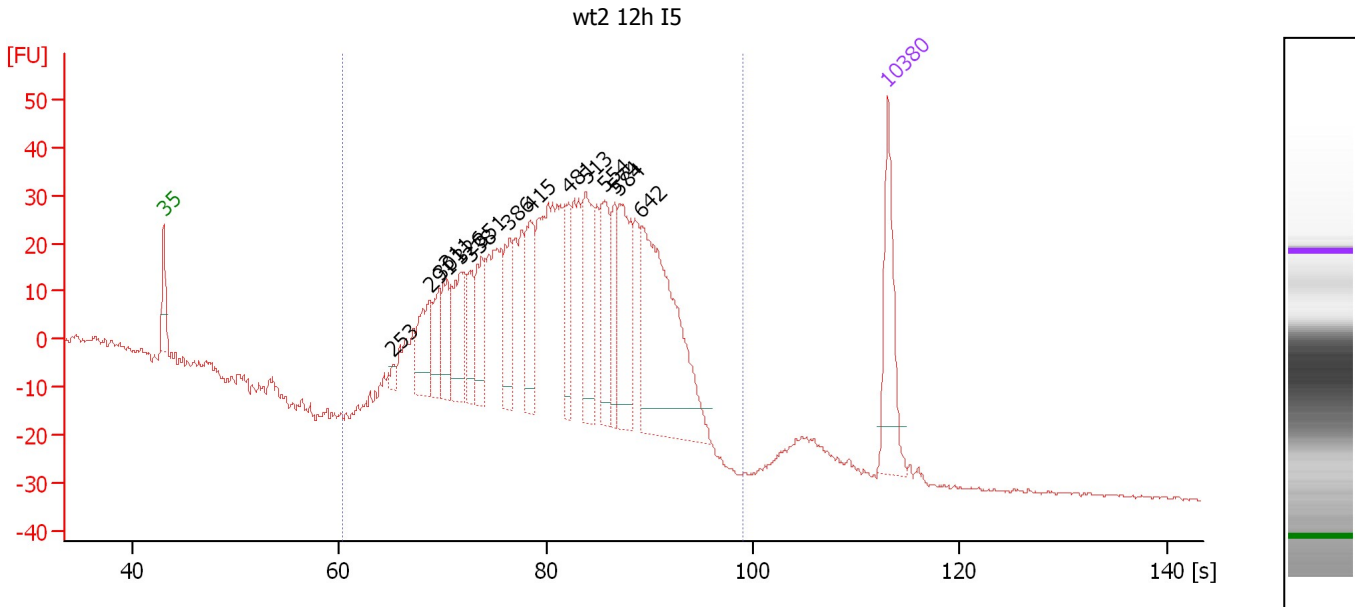
Region table for sample 2 : wt3 r I4

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,184	431	1,089.7	1,634.22	6,551.4	94	31.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : wt2 12h I5

Number of peaks found: 15 Corr. Area 1: 1,130.7
 Noise: 0.4

Peak table for sample 3 : wt2 12h I5

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	253	9.56	57.3		65.23
3	291	63.52	330.7		68.76
4	301	46.39	233.2		69.69
5	311	51.42	250.9		70.42
6	326	74.19	344.7		71.66
7	338	40.00	179.4		72.60
8	351	63.90	275.5		73.69
9	386	59.20	232.5		76.44
10	415	75.71	276.5		78.42
11	481	57.97	182.5		82.15
12	513	95.28	281.3		83.82
13	554	77.19	211.2		85.69
14	574	48.54	128.1		86.62
15	584	98.35	255.0		87.09
16	642	265.38	626.0		89.16
17	10,380	75.00	10.9	Upper Marker	113.00

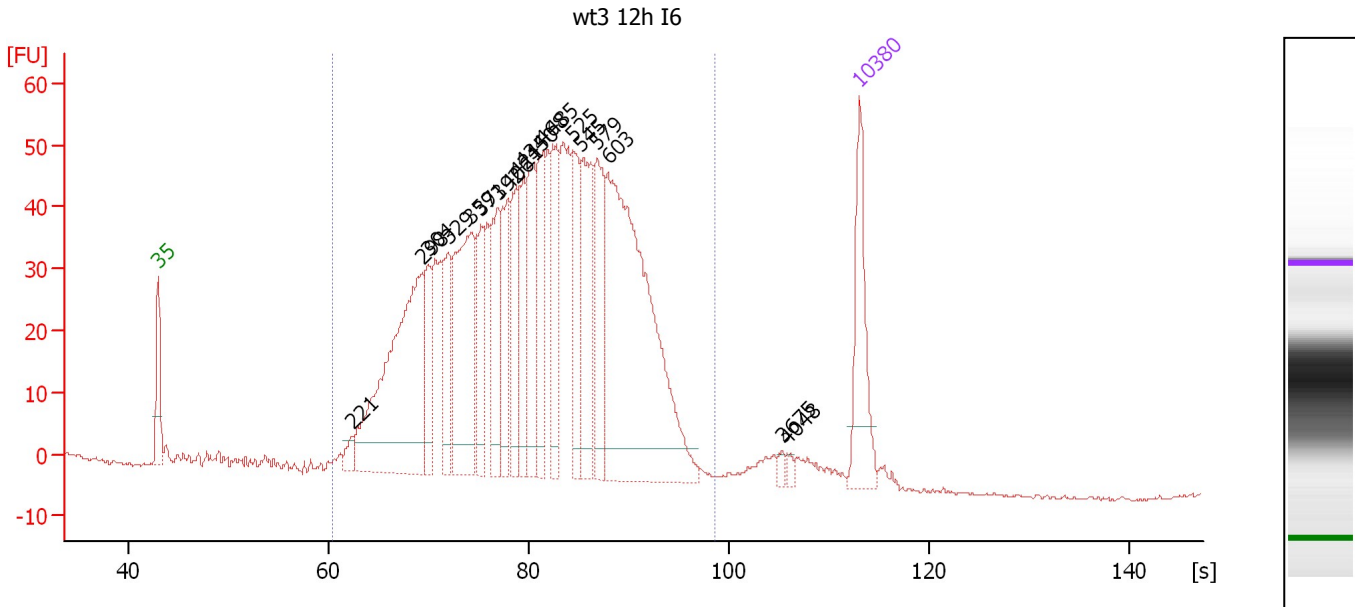
Region table for sample 3 : wt2 12h I5

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,653	499	1,130.7	1,655.10	5,707.8	100	30.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : wt3 12h I6

Number of peaks found: 19 Corr. Area 1: 1,462.2
 Noise: 0.3

Peak table for sample 4 : wt3 12h I6

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	221	14.97	102.7		62.31
3	298	344.02	1,749.3		69.39
4	304	64.09	319.0		69.93
5	329	73.05	336.2		71.91
6	359	184.96	781.3		74.27
7	371	65.54	267.9		75.24
8	392	89.90	347.9		76.90
9	406	82.03	306.1		77.92
10	421	85.11	306.1		78.78
11	434	66.87	233.7		79.48
12	450	89.96	303.0		80.39
13	468	92.45	299.3		81.41
14	485	88.45	276.3		82.37
15	525	82.60	238.4		84.36
16	545	112.84	313.8		85.27
17	579	92.42	242.0		86.82
18	603	417.82	1,050.2		87.90
19	3,675	4.40	1.8		105.33
20	4,048	4.18	1.6		105.81
21	10,380	75.00	10.9	Upper Marker	113.00

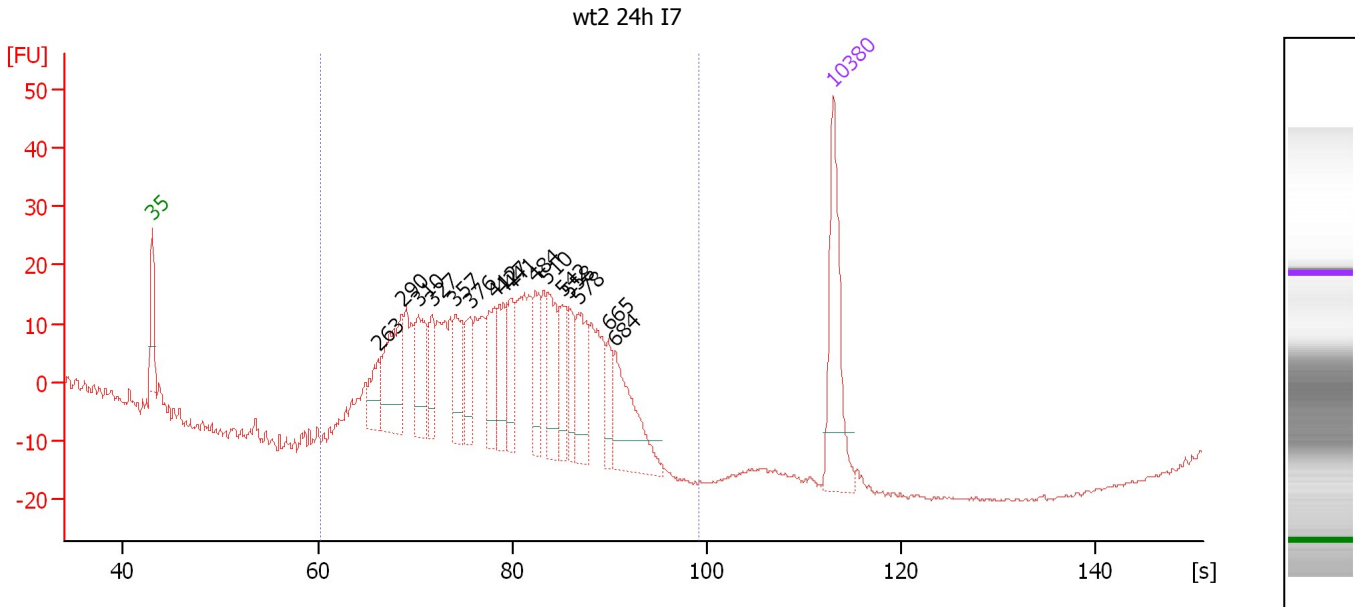
Region table for sample 4 : wt3 12h I6

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,580	483	1,462.2	2,385.62	8,750.7	97	34.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : wt2 24h I7

Number of peaks found: 16 Corr. Area 1: 518.3
 Noise: 0.3

Peak table for sample 5 : wt2 24h I7

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	263	34.29	197.3		66.20
3	290	87.40	457.0		68.64
4	310	57.27	280.3		70.35
5	327	30.44	141.1		71.73
6	357	41.33	175.3		74.16
7	376	33.34	134.4		75.65
8	412	45.74	168.3		78.25
9	427	42.77	151.9		79.08
10	441	36.73	126.1		79.91
11	484	38.30	119.8		82.34
12	510	53.67	159.5		83.66
13	542	36.13	101.0		85.15
14	558	30.14	81.9		85.87
15	578	50.68	132.8		86.81
16	665	21.74	49.5		89.91
17	684	75.02	166.1		90.51
18	10,380	75.00	10.9	Upper Marker	113.00

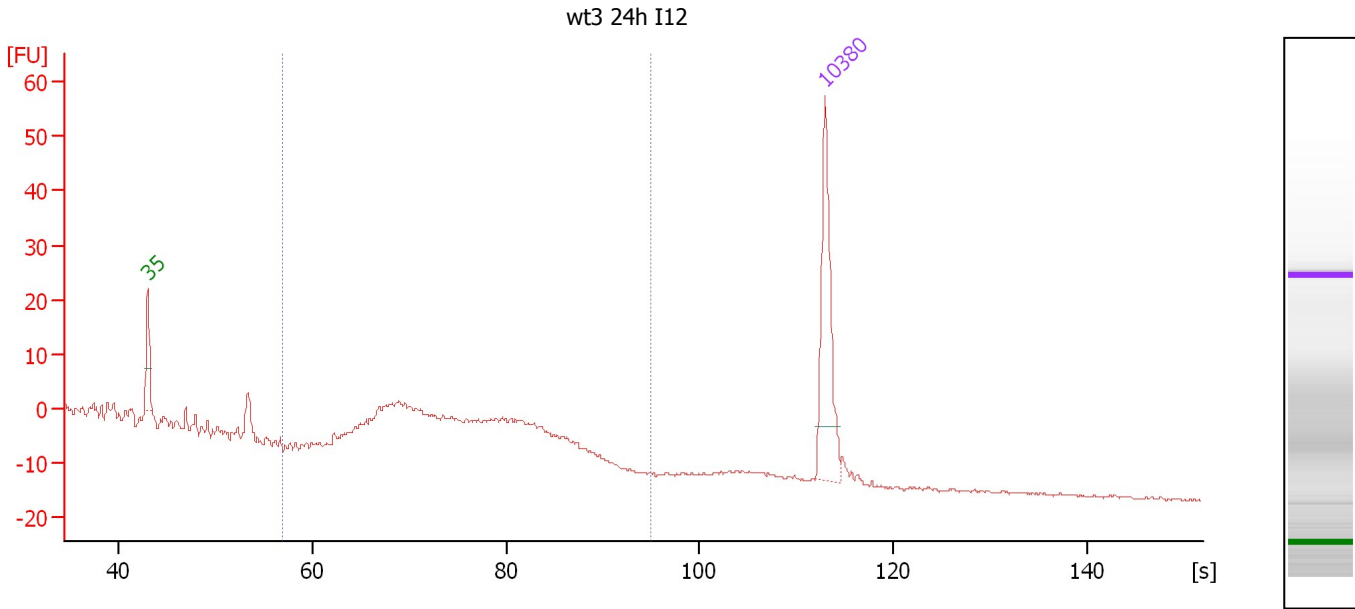
Region table for sample 5 : wt2 24h I7

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,656	449	518.3	746.60	2,815.7	100	27.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : wt3 24h I12

Number of peaks found: 0 Corr. Area 1: 129.6
 Noise: 0.3

Peak table for sample 6 : wt3 24h I12

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

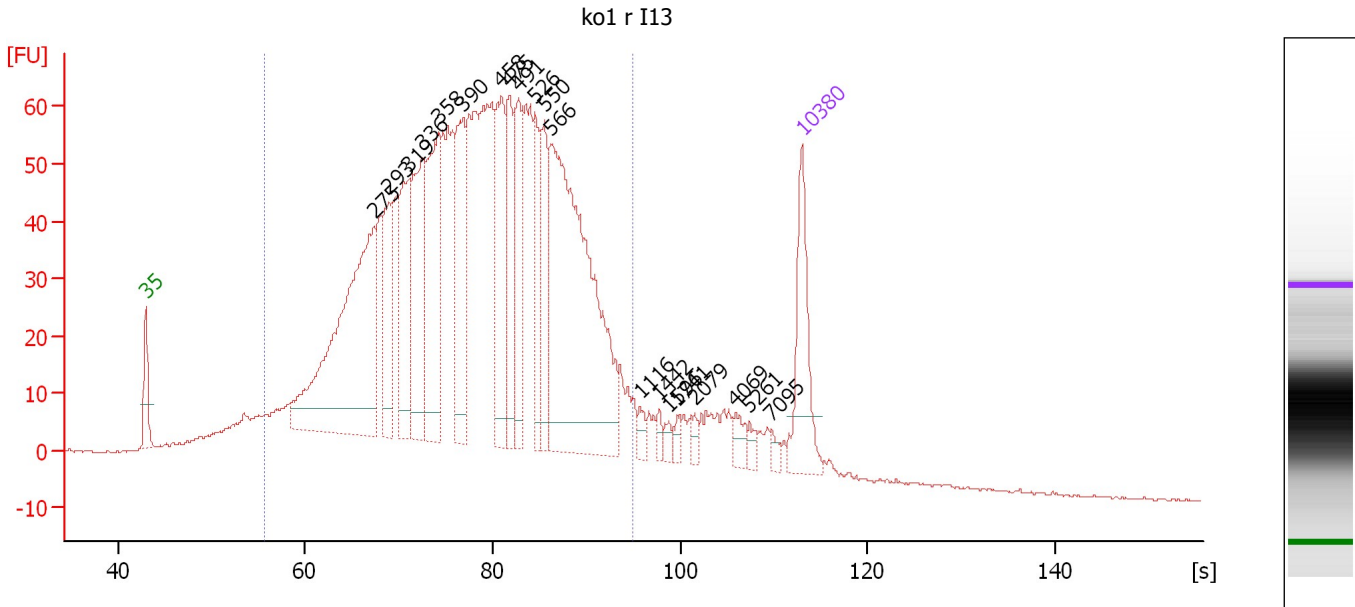
Region table for sample 6 : wt3 24h I12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
164	1,000	383	129.6	217.70	932.7	86	23.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : ko1 r I13

Number of peaks found: 20 Corr. Area 1: 2,040.6
 Noise: 0.2

Peak table for sample 7 : ko1 r I13


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	275	431.08	2,374.4		67.29
3	293	100.88	521.4		68.95
4	319	128.65	611.7		71.07
5	336	161.48	728.6		72.44
6	358	178.27	754.5		74.22
7	390	131.37	510.1		76.80
8	458	126.14	417.0		80.86
9	475	87.43	279.1		81.78
10	491	104.50	322.5		82.70
11	526	78.46	225.9		84.42
12	550	73.61	202.8		85.50
13	566	439.18	1,175.4		86.25
14	1,116	10.42	14.2		95.70
15	1,442	7.19	7.6		97.76
16	1,596	7.76	7.4		98.74
17	1,741	6.35	5.5		99.65
18	2,079	6.57	4.8		101.54
19	4,069	13.81	5.1		105.84
20	5,261	7.66	2.2		107.39
21	7,095	6.80	1.5		109.73
22	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...

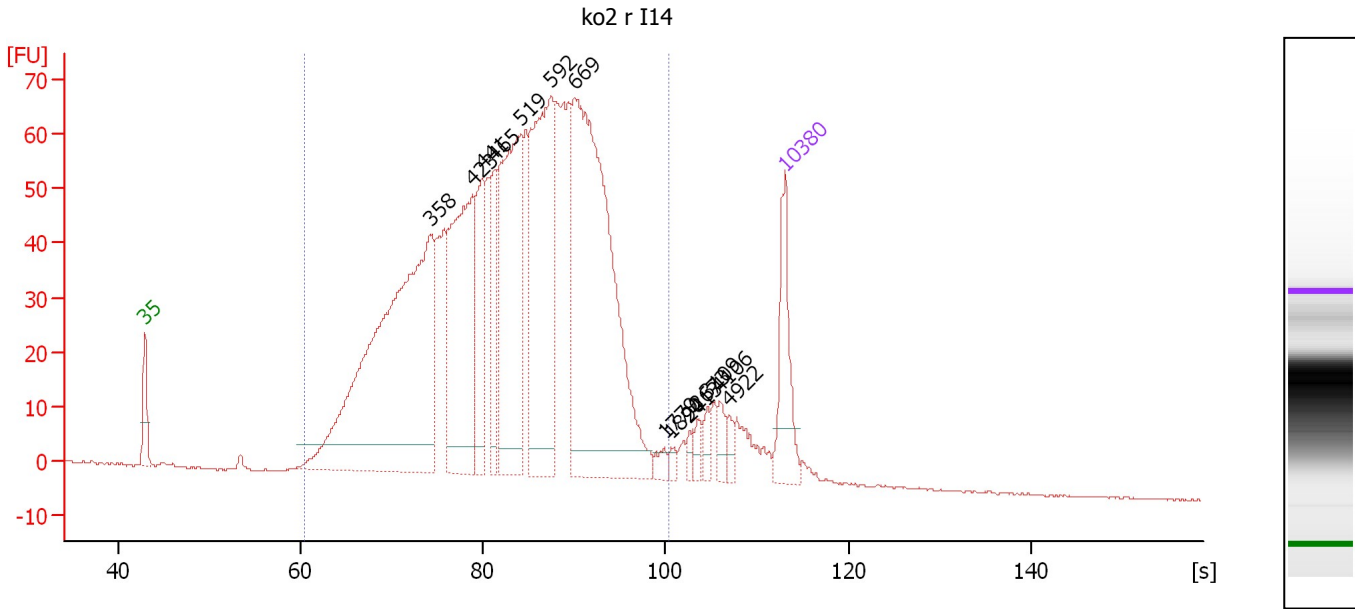
... Region table for sample 7 : ko1 r I13

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/ μ l]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
150	1,000	434	2,040.5	3,282.30	13,910.6	 88	35.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : ko2 r I14

Number of peaks found: 14 Corr. Area 1: 1,806.5
 Noise: 0.2

Peak table for sample 8 : ko2 r I14

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	358	734.83	3,111.1		74.21
3	423	305.03	1,093.6		78.85
4	441	114.99	394.7		79.91
5	465	85.59	278.6		81.26
6	519	315.19	920.2		84.08
7	592	322.42	825.3		87.43
8	669	598.41	1,355.4		90.02
9	1,779	10.03	8.5		99.89
10	1,890	6.87	5.5		100.60
11	2,413	7.88	5.0		102.60
12	2,673	11.75	6.7		103.42
13	3,109	12.14	5.9		104.60
14	4,106	15.12	5.6		105.89
15	4,922	11.31	3.5		106.95
16	10,380	75.00	10.9	Upper Marker	113.00

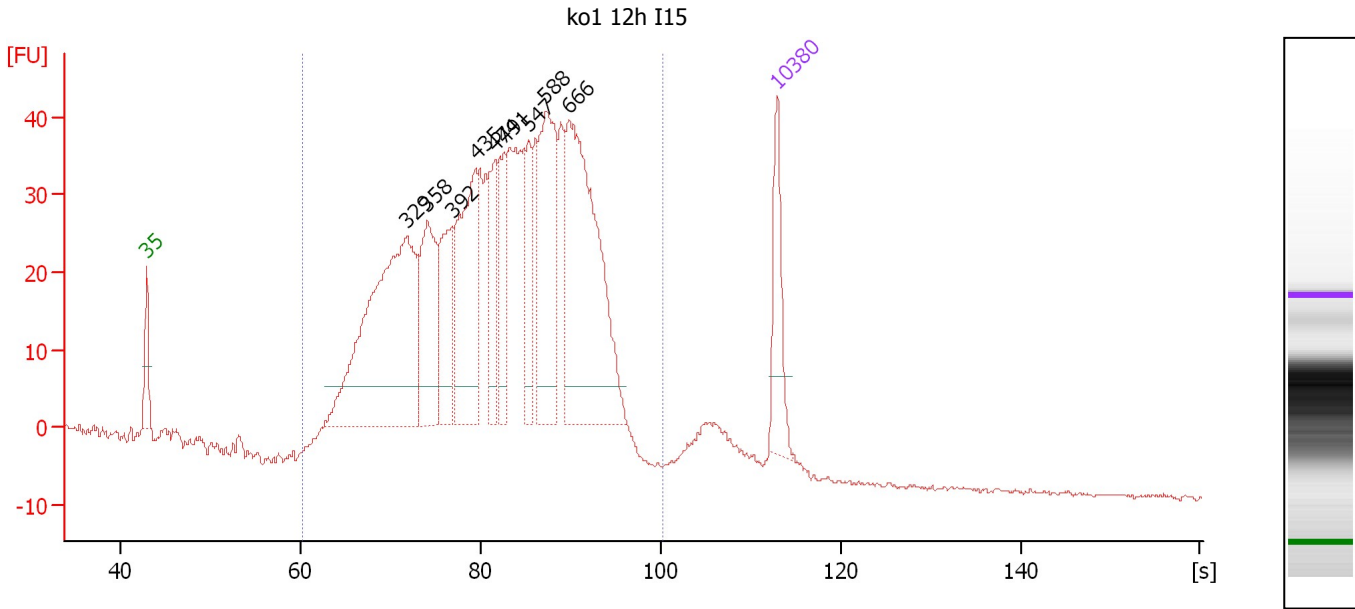
Region table for sample 8 : ko2 r I14

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,843	547	1,806.5	3,076.74	10,445.5	94	41.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : ko1 12h I15

Number of peaks found: 9 Corr. Area 1: 1,132.2
 Noise: 0.2

Peak table for sample 9 : ko1 12h I15

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	329	533.90	2,456.9		71.92
3	358	175.29	742.8		74.18
4	392	124.11	479.9		76.93
5	435	231.22	805.4		79.55
6	474	92.19	294.6		81.76
7	491	100.44	309.9		82.71
8	547	79.82	220.9		85.39
9	588	213.92	551.5		87.24
10	666	399.20	908.2		89.93
11	10,380	75.00	10.9	Upper Marker	113.00

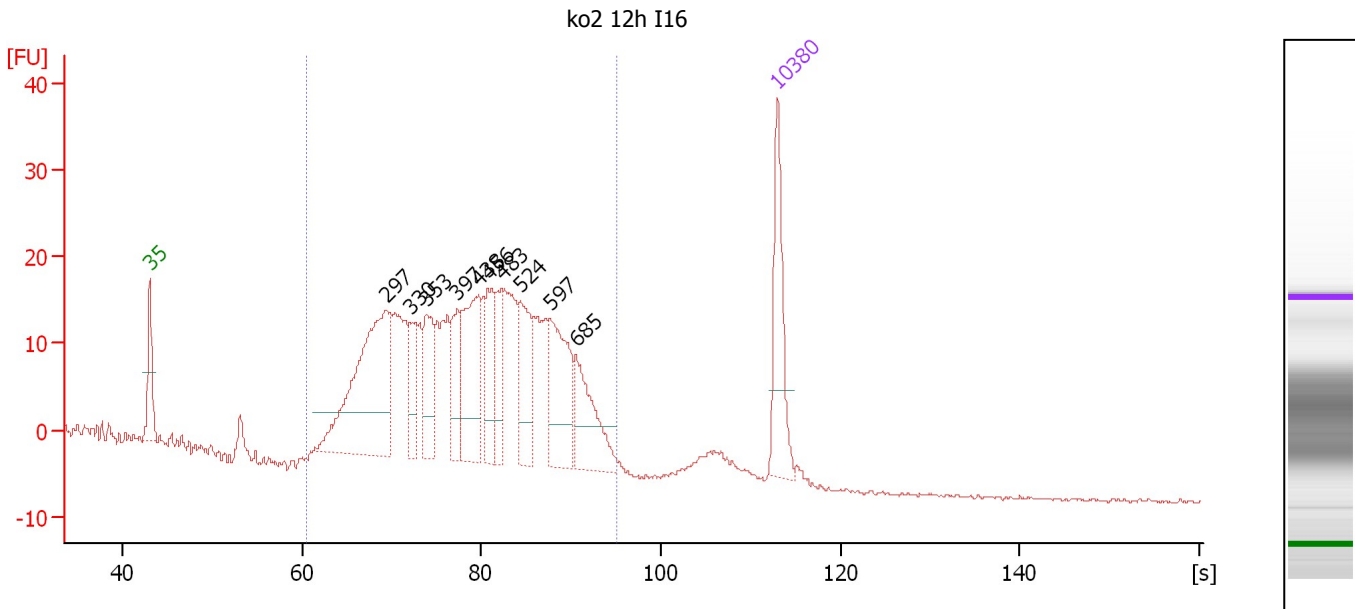
Region table for sample 9 : ko1 12h I15

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,839	519	1,132.2	2,836.27	9,886.3	97	36.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
 Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : ko2 12h I16

Number of peaks found: 10 Corr. Area 1: 519.8
 Noise: 0.2

Peak table for sample 10 : ko2 12h I16

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	297	286.45	1,458.9		69.35
3	330	46.91	215.3		71.98
4	353	69.52	298.2		73.84
5	397	53.58	204.7		77.31
6	438	124.86	432.2		79.71
7	456	63.24	210.2		80.72
8	483	52.29	163.9		82.28
9	524	72.28	209.0		84.32
10	597	107.58	273.0		87.67
11	685	84.54	186.9		90.54
12	10,380	75.00	10.9	Upper Marker	113.00

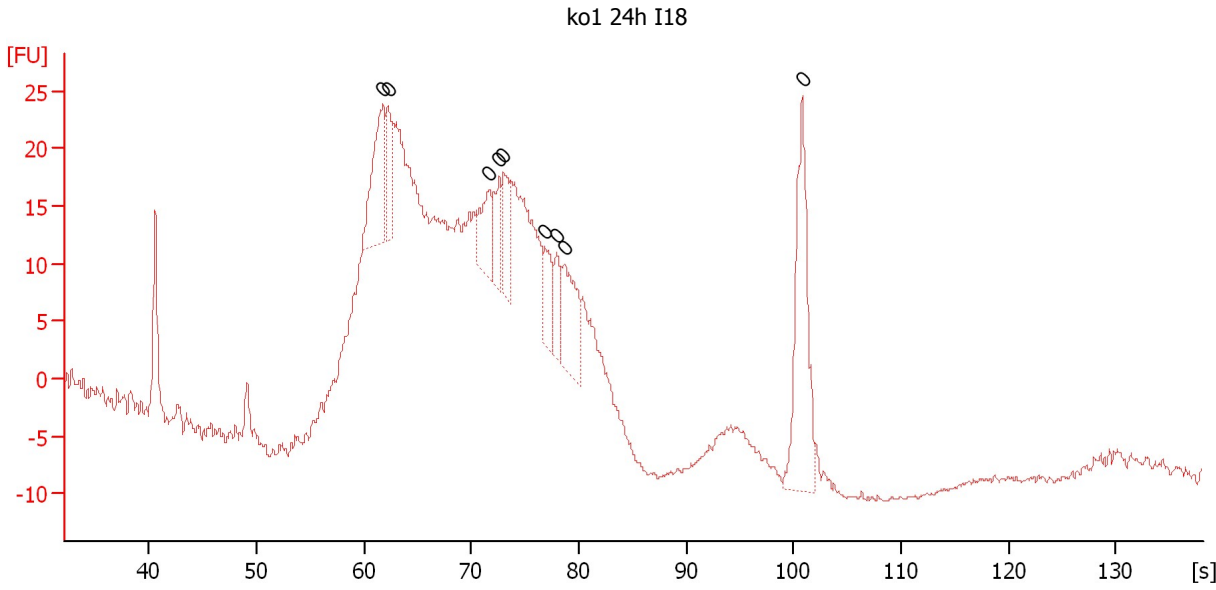
Region table for sample 10 : ko2 12h I16

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Conc. [pg/μl]	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	451	519.8	1,360.28	5,236.0	98	31.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
Modified: 3/16/2018 4:04:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : ko1 24h I18

Number of peaks found: 0 Noise: 0.2

Peak table for sample 11 : ko1 24h I18

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0		61.70
2	0	0.00	0.0		62.20
3	0	0.00	0.0		71.65
4	0	0.00	0.0		72.60
5	0	0.00	0.0		73.00
6	0	0.00	0.0		76.80
7	0	0.00	0.0		77.90
8	0	0.00	0.0		78.60
9	0	0.00	0.0		100.80

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-03-16\2018-03-16_004.xad

Created: 3/16/2018 3:23:27 PM
Modified: 3/16/2018 4:04:44 PM

Gel Image

