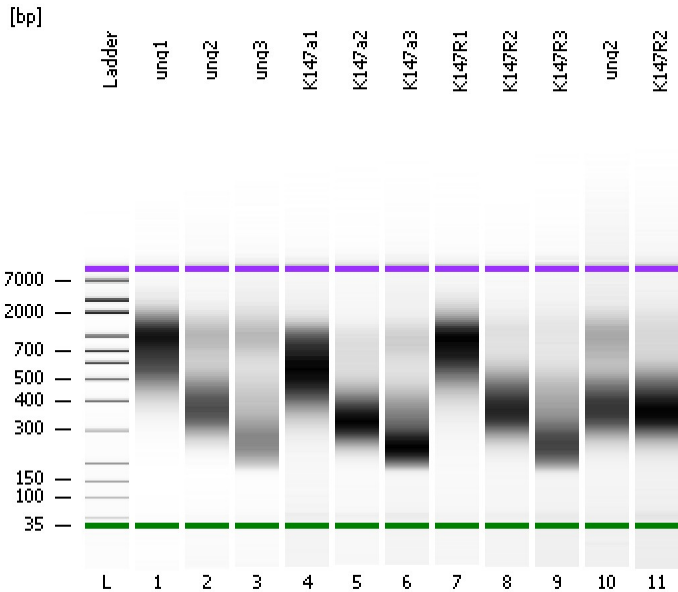


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
Modified: 6/20/2017 12:30:00 PM

Electrophoresis File Run Summary



Instrument Information:

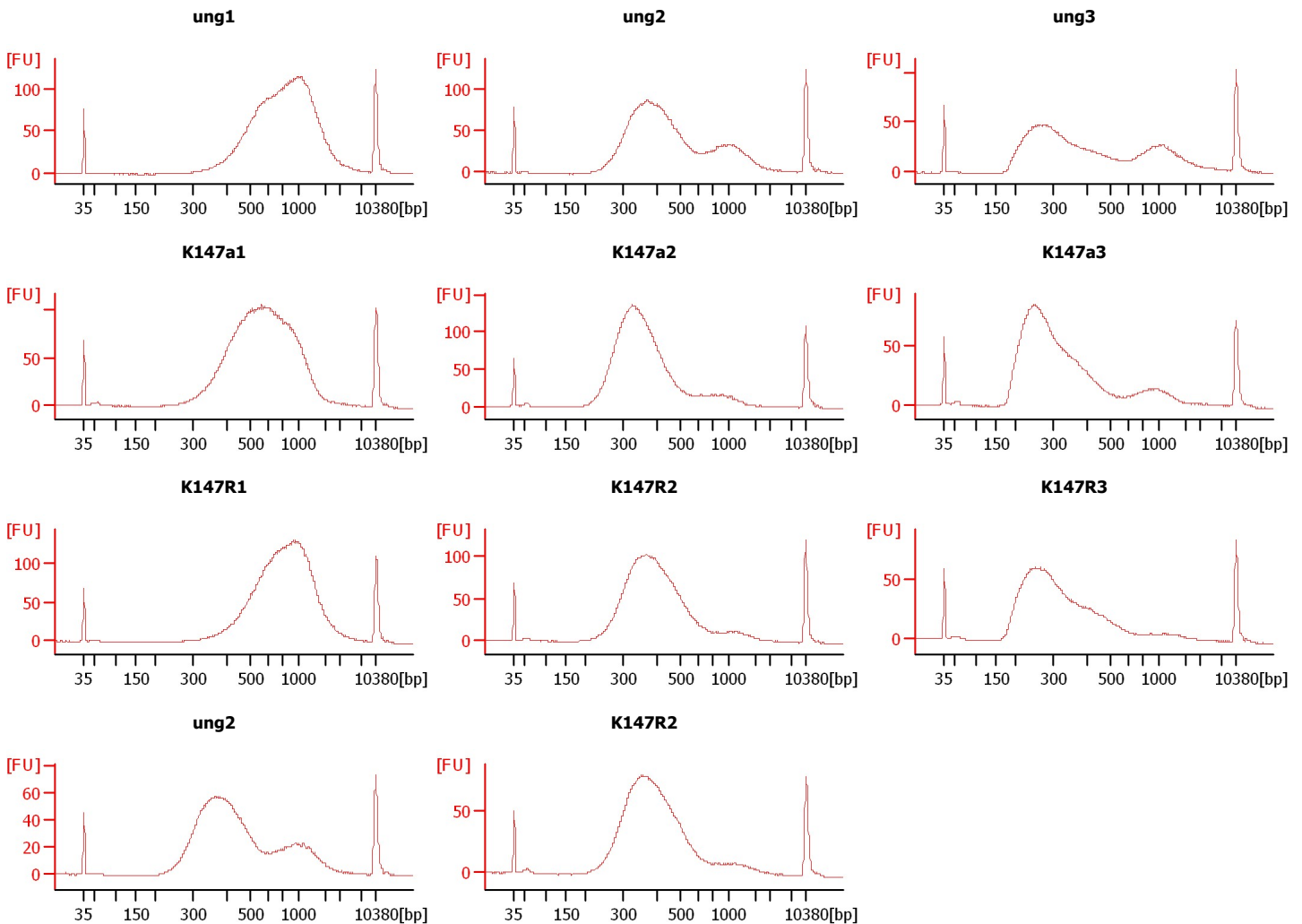
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
ung1		<input type="checkbox"/>	✓			
ung2		<input type="checkbox"/>	✓			
ung3		<input type="checkbox"/>	✓			
K147a1		<input type="checkbox"/>	✓			
K147a2		<input type="checkbox"/>	✓			
K147a3		<input type="checkbox"/>	✓			
K147R1		<input type="checkbox"/>	✓			
K147R2		<input type="checkbox"/>	✓			
K147R3		<input type="checkbox"/>	✓			
ung2		<input type="checkbox"/>	✓			
K147R2		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

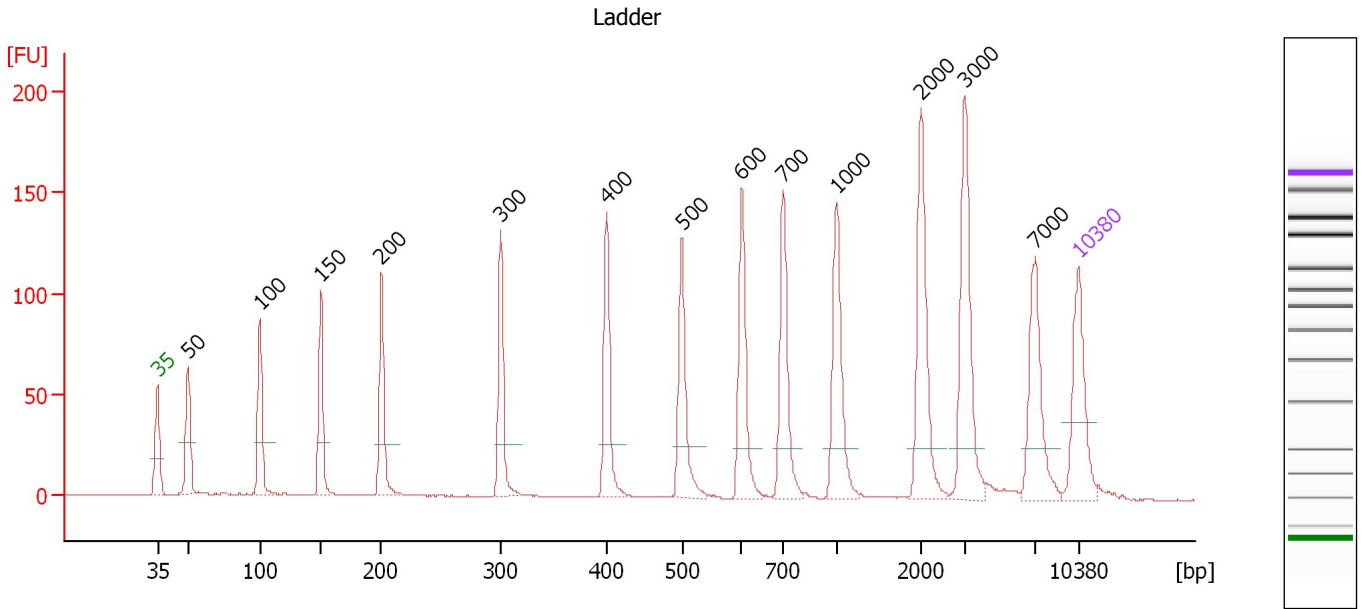
Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

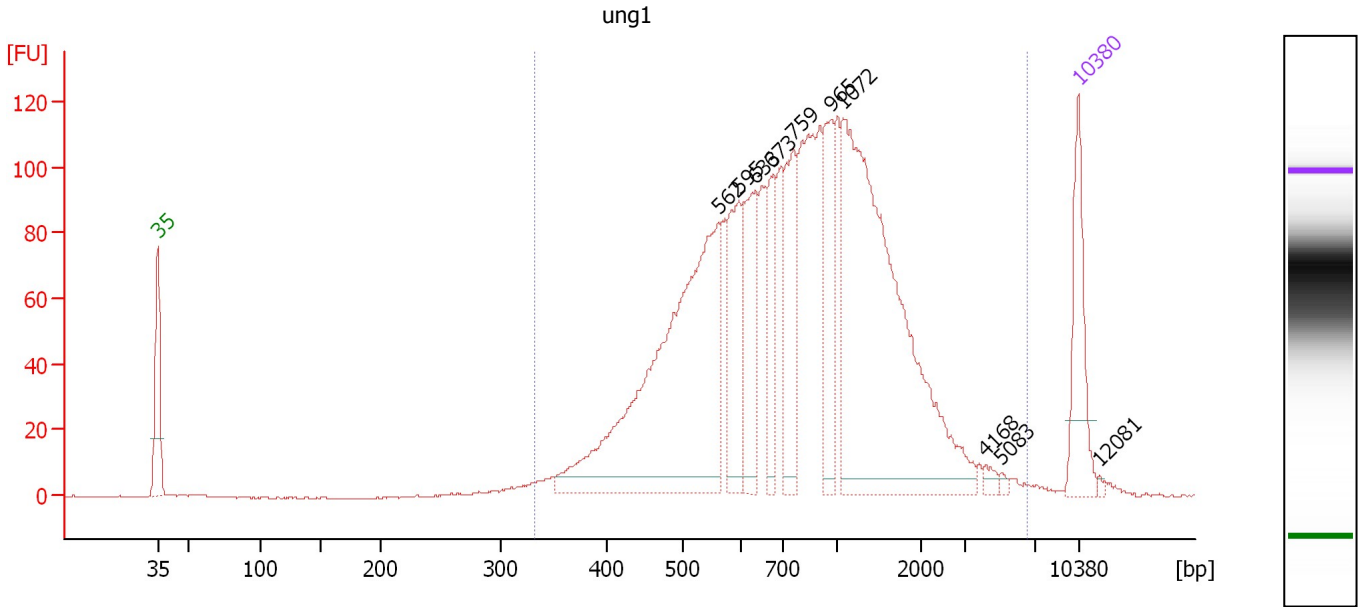
Peak table for Ladder

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	45.30
3	100	150.00	2,272.7	Ladder Peak	50.78
4	150	150.00	1,515.2	Ladder Peak	55.43
5	200	150.00	1,136.4	Ladder Peak	60.03
6	300	150.00	757.6	Ladder Peak	69.09
7	400	150.00	568.2	Ladder Peak	77.15
8	500	150.00	454.5	Ladder Peak	82.86
9	600	150.00	378.8	Ladder Peak	87.41
10	700	150.00	324.7	Ladder Peak	90.54
11	1,000	150.00	227.3	Ladder Peak	94.64
12	2,000	150.00	113.6	Ladder Peak	101.03
13	3,000	150.00	75.8	Ladder Peak	104.39
14	7,000	150.00	32.5	Ladder Peak	109.73
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : ung1

Number of peaks found: 10 Corr. Area 1: 2,233.9
 Noise: 0.1

Peak table for sample 1 : ung1

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	562	523.92	1,413.7		85.66
3	595	110.76	282.3		87.16
4	633	110.44	264.6		88.43
5	673	73.38	165.2		89.70
6	759	115.93	231.5		91.34
7	965	94.20	147.9		94.16
8	1,072	521.75	737.1		95.10
9	4,168	6.87	2.5		105.95
10	5,083	3.29	1.0		107.17
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,081	0.00	0.0		114.64

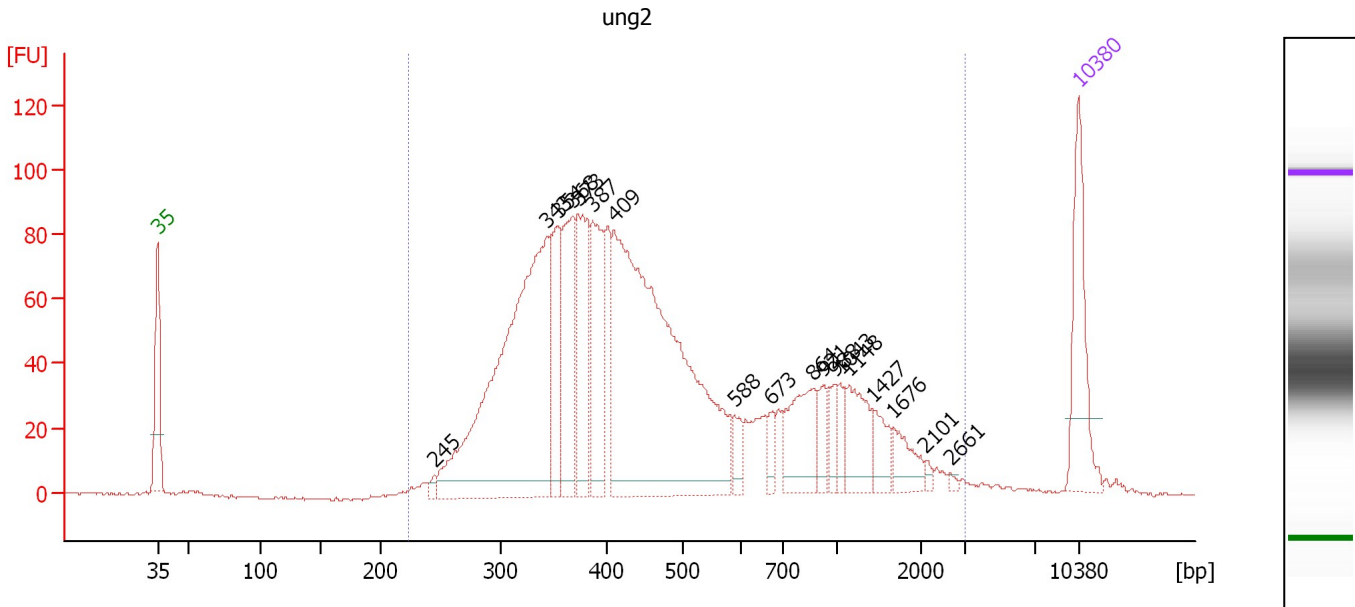
Region table for sample 1 : ung1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
333	6,527	987	2,233.9	4,339.9	2,036.49	99	68.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : ung2

Number of peaks found: 18 Corr. Area 1: 2,056.4
 Noise: 0.4

Peak table for sample 2 : ung2

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	245	7.05	43.6		64.08
3	343	503.30	2,222.0		72.57
4	354	94.57	404.8		73.44
5	368	122.26	503.7		74.55
6	373	122.23	496.3		74.98
7	387	114.99	450.3		76.09
8	409	584.63	2,163.5		77.69
9	588	18.64	48.1		86.85
10	673	15.84	35.7		89.70
11	864	71.08	124.6		92.79
12	921	22.51	37.0		93.56
13	988	17.83	27.3		94.47
14	1,043	17.55	25.5		94.91
15	1,148	50.38	66.5		95.58
16	1,427	25.15	26.7		97.37
17	1,676	25.59	23.1		98.96
18	2,101	3.79	2.7		101.37
19	2,661	2.20	1.3		103.25
20	10,380	75.00	10.9	Upper Marker	113.00

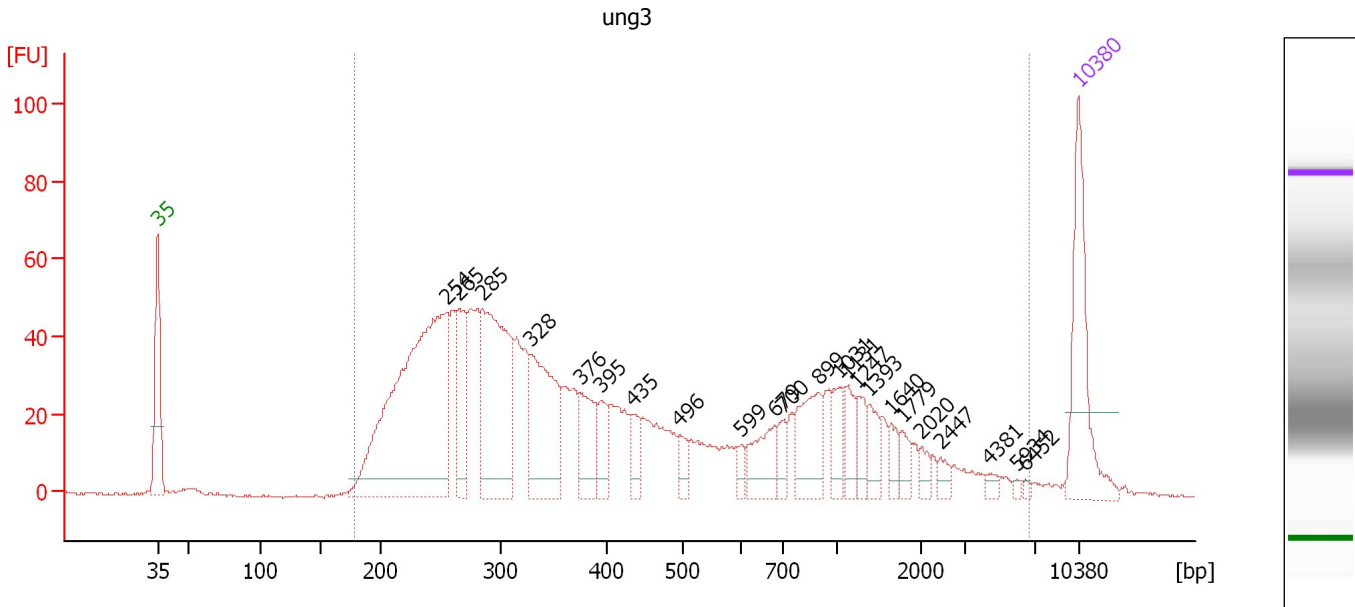
Region table for sample 2 : ung2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
223	2,990	578	2,056.4	7,118.6	1,975.91	98	71.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : ung3

Number of peaks found: 23 Corr. Area 1: 1,522.1
 Noise: 0.4

Peak table for sample 3 : ung3

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	254	392.45	2,336.6		64.97
3	265	68.26	389.8		65.95
4	285	194.26	1,032.9		67.73
5	328	122.35	564.4		71.39
6	376	49.09	198.0		75.19
7	395	27.37	105.1		76.72
8	435	22.83	79.5		79.14
9	496	14.15	43.2		82.64
10	599	9.05	22.9		87.38
11	679	39.03	87.0		89.90
12	700	14.43	31.2		90.54
13	899	50.63	85.4		93.25
14	1,031	20.97	30.8		94.83
15	1,131	21.31	28.5		95.48
16	1,247	17.22	20.9		96.22
17	1,393	17.56	19.1		97.15
18	1,640	12.71	11.7		98.73
19	1,779	10.99	9.4		99.62
20	2,020	8.04	6.0		101.10
21	2,447	7.03	4.4		102.53
22	4,381	4.92	1.7		106.24
23	5,934	2.43	0.6		108.31
24	6,452	2.12	0.5		109.00
25	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...

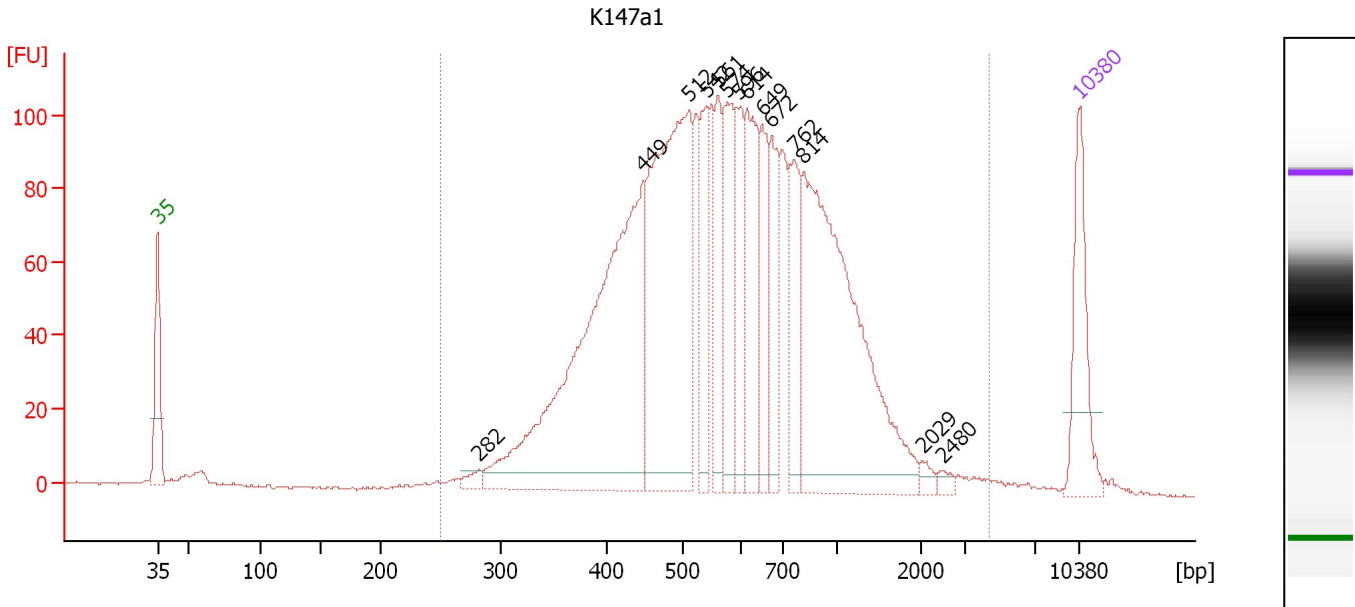
... Region table for sample 3 : ung3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
178	6,591	665	1,522.1	7,134.3	1,599.45	99	100.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : K147a1

Number of peaks found: 14 Corr. Area 1: 2,411.5
 Noise: 0.4

Peak table for sample 4 : K147a1

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	282	11.94	64.2		67.44
3	449	565.72	1,910.9		79.92
4	512	416.17	1,231.5		83.40
5	542	78.27	218.8		84.77
6	561	83.24	224.9		85.63
7	574	110.52	291.7		86.23
8	596	72.55	184.4		87.24
9	614	119.11	293.9		87.85
10	649	73.59	171.7		88.96
11	672	81.12	182.9		89.67
12	762	83.10	165.3		91.38
13	814	422.54	787.0		92.09
14	2,029	7.22	5.4		101.13
15	2,480	5.91	3.6		102.65
16	10,380	75.00	10.9	Upper Marker	113.00

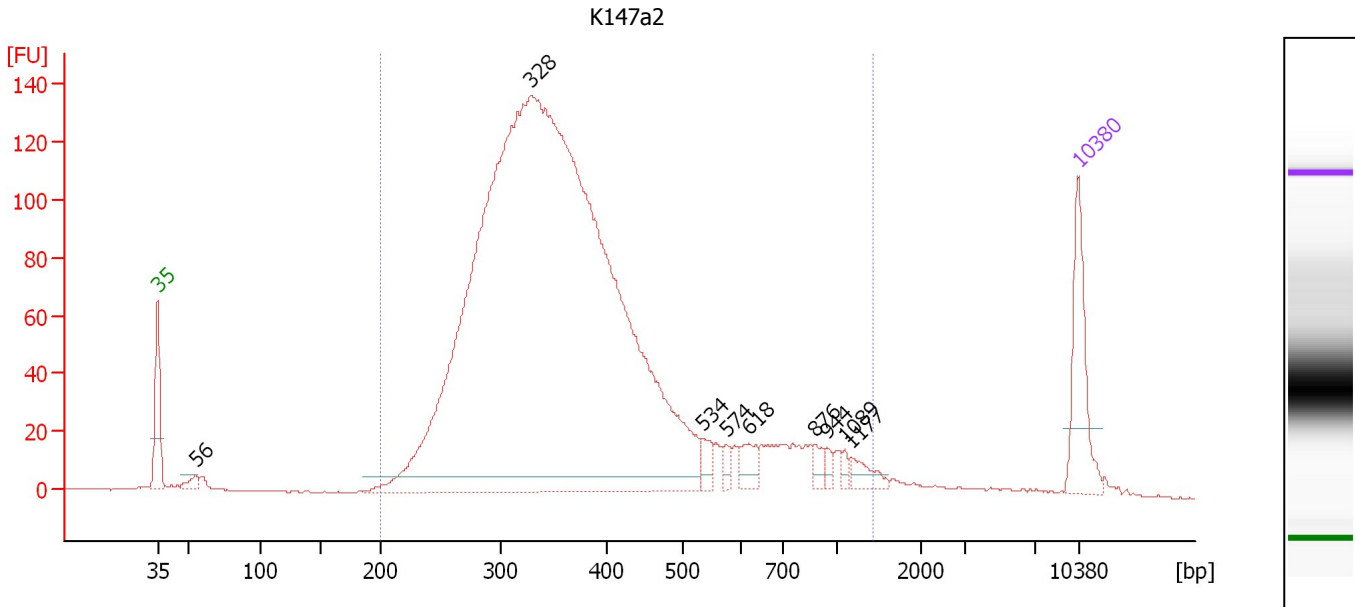
Region table for sample 4 : K147a1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
249	4,316	677	2,411.5	6,471.6	2,319.04	98	56.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : K147a2

Number of peaks found: 9 Corr. Area 1: 2,532.1
 Noise: 0.3

Peak table for sample 5 : K147a2

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	56	15.08	410.3		45.92
3	328	2,547.93	11,765.7		71.36
4	534	18.20	51.7		84.38
5	574	10.97	28.9		86.23
6	618	22.24	54.5		87.97
7	876	11.40	19.7		92.95
8	944	8.30	13.3		93.87
9	1,089	7.14	9.9		95.21
10	1,177	17.92	23.1		95.77
11	10,380	75.00	10.9	Upper Marker	113.00

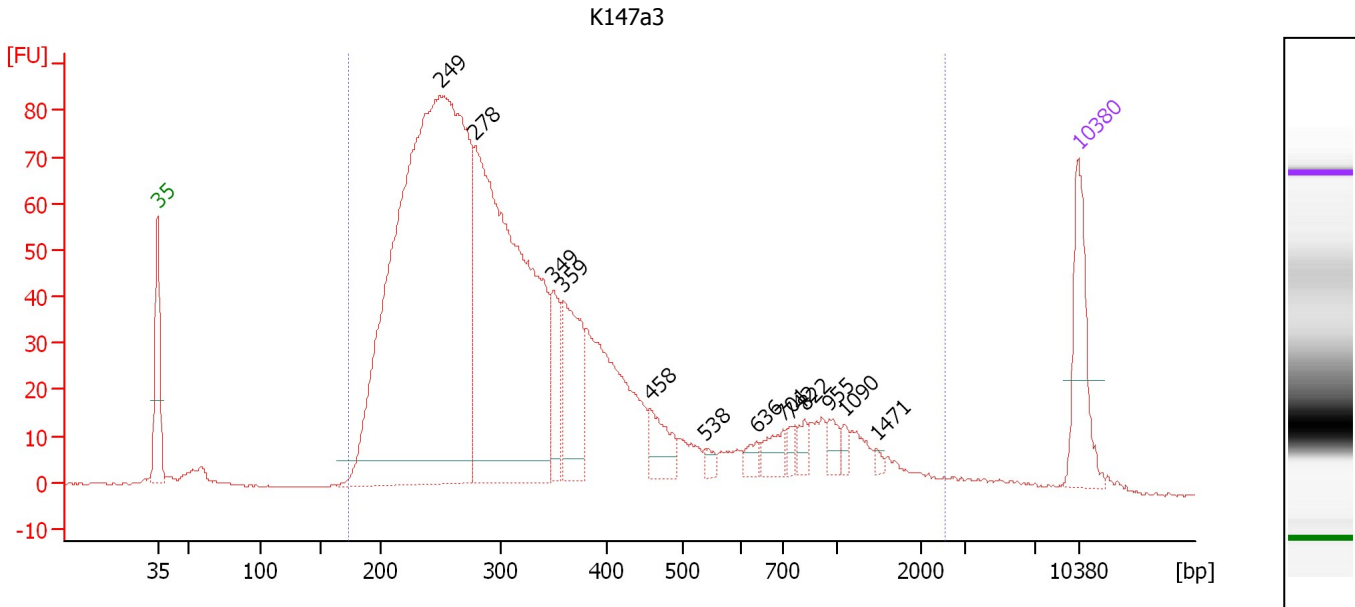
Region table for sample 5 : K147a2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,420	395	2,532.1	11,854.5	2,718.49	97	41.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : K147a3

Number of peaks found: 13 Corr. Area 1: 1,864.2
 Noise: 0.2

Peak table for sample 6 : K147a3

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	249	1,439.40	8,760.3		64.47
3	278	784.06	4,280.2		67.06
4	349	69.09	299.6		73.07
5	359	126.02	531.8		73.85
6	458	44.12	146.1		80.44
7	538	9.28	26.1		84.59
8	636	13.00	31.0		88.53
9	701	24.16	52.3		90.55
10	742	10.45	21.3		91.12
11	822	14.41	26.6		92.21
12	955	15.87	25.2		94.02
13	1,090	8.58	11.9		95.21
14	1,471	4.05	4.2		97.65
15	10,380	75.00	10.9	Upper Marker	113.00

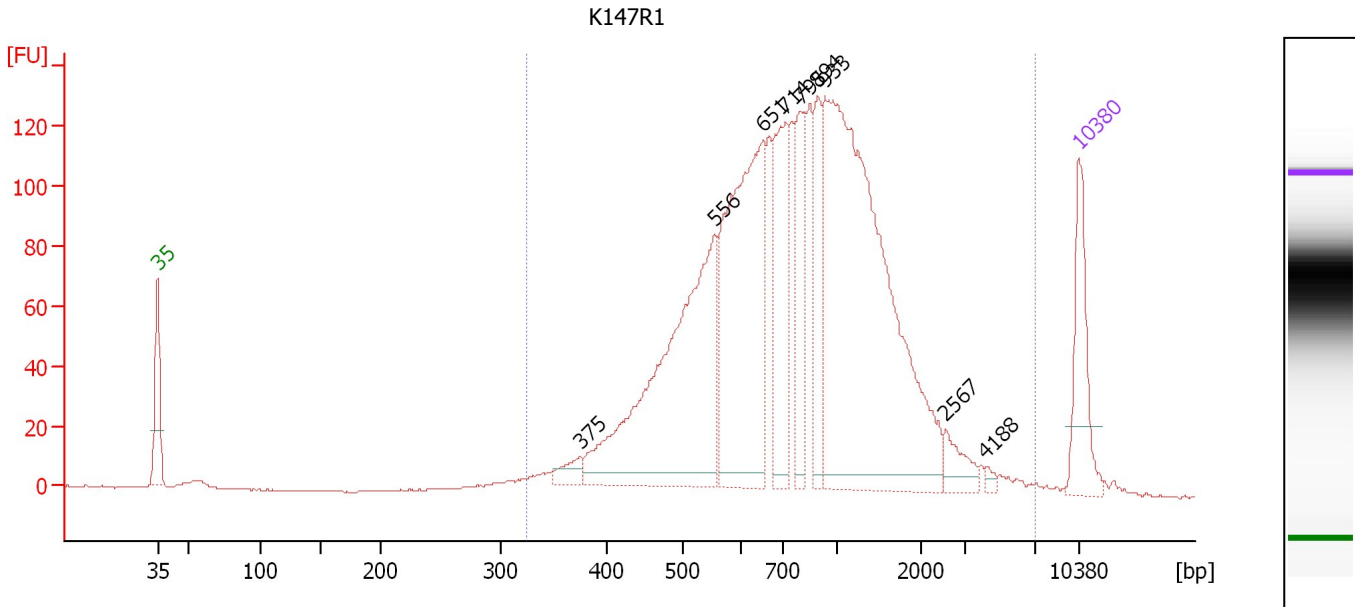
Region table for sample 6 : K147a3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
172	2,542	392	1,864.2	15,575.5	3,005.07	98	74.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : K147R1

Number of peaks found: 9 Corr. Area 1: 2,377.1
 Noise: 0.3

Peak table for sample 7 : K147R1

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	375	21.03	85.0		75.12
3	556	435.28	1,187.1		85.39
4	651	379.41	883.2		89.00
5	714	154.43	327.7		90.73
6	795	89.50	170.7		91.83
7	894	81.26	137.7		93.19
8	933	648.88	1,054.1		93.72
9	2,567	26.31	15.5		102.94
10	4,188	4.88	1.8		105.98
11	10,380	75.00	10.9	Upper Marker	113.00

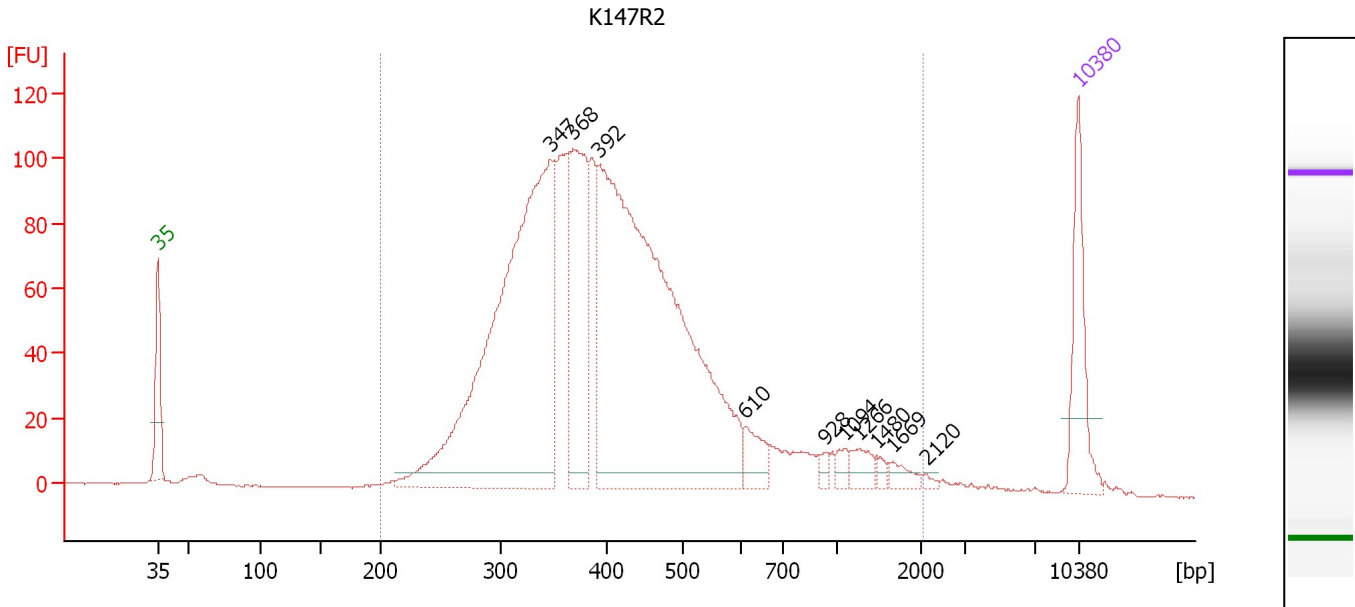
Region table for sample 7 : K147R1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
324	7,007	975	2,377.1	4,499.4	2,113.53	98	70.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : K147R2

Number of peaks found: 10 Corr. Area 1: 2,162.7
 Noise: 0.2

Peak table for sample 8 : K147R2

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	347	761.60	3,329.1		72.85
3	368	221.31	910.8		74.58
4	392	890.73	3,440.2		76.53
5	610	33.37	82.9		87.72
6	928	7.46	12.2		93.66
7	1,094	10.58	14.7		95.24
8	1,266	20.19	24.2		96.34
9	1,480	6.35	6.5		97.71
10	1,669	12.83	11.6		98.92
11	2,120	3.42	2.4		101.44
12	10,380	75.00	10.9	Upper Marker	113.00

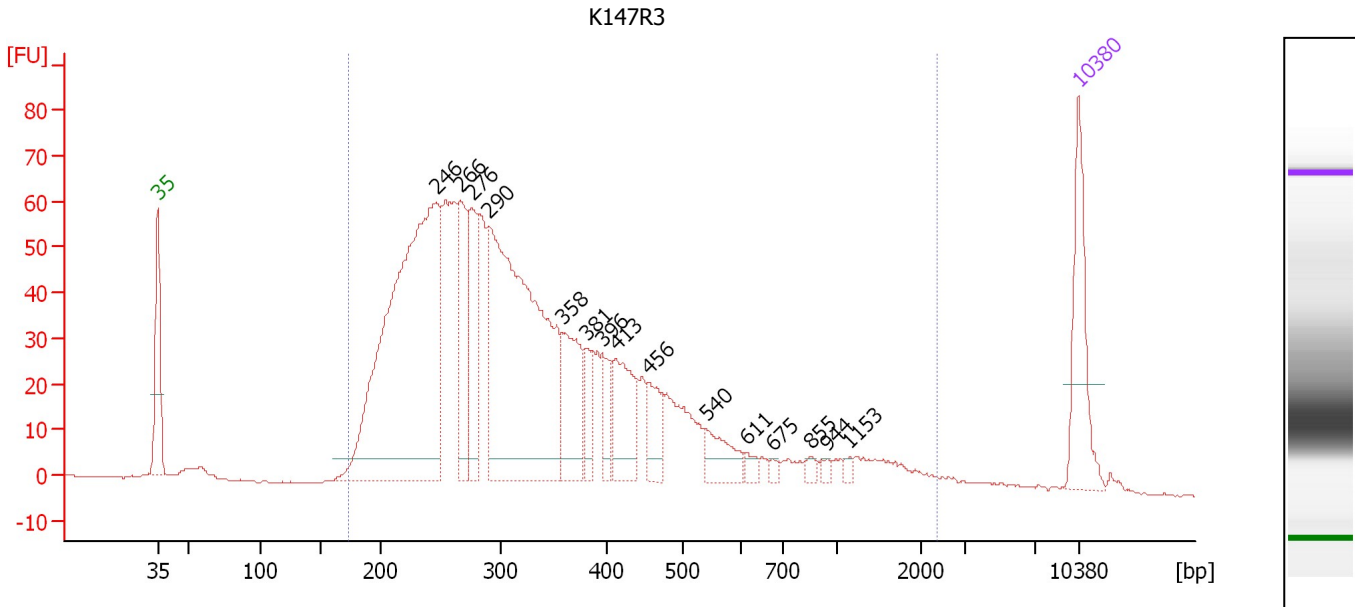
Region table for sample 8 : K147R2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	2,040	454	2,162.7	8,990.0	2,285.44	98	52.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : K147R3

Number of peaks found: 15 Corr. Area 1: 1,530.6
 Noise: 0.2

Peak table for sample 9 : K147R3

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	246	679.45	4,187.4		64.18
3	266	114.44	651.3		66.03
4	276	94.79	520.1		66.93
5	290	537.70	2,808.0		68.20
6	358	101.13	428.3		73.75
7	381	36.27	144.1		75.65
8	396	32.69	124.9		76.86
9	413	84.49	310.2		77.87
10	456	42.19	140.1		80.35
11	540	38.94	109.2		84.68
12	611	8.59	21.3		87.75
13	675	5.03	11.3		89.75
14	855	6.61	11.7		92.66
15	944	4.47	7.2		93.88
16	1,153	5.15	6.8		95.62
17	10,380	75.00	10.9	Upper Marker	113.00

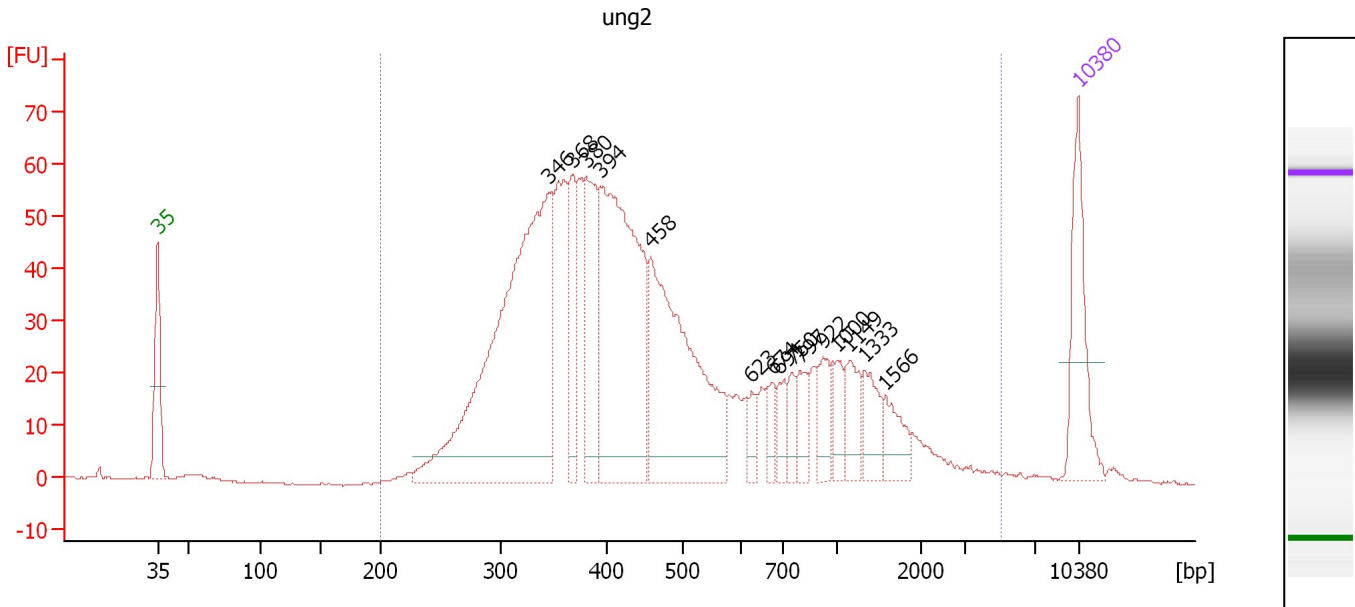
Region table for sample 9 : K147R3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
172	2,352	382	1,530.6	12,018.1	2,340.35	98	70.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : ung2

Number of peaks found: 15 Corr. Area 1: 1,422.3
 Noise: 0.2

Peak table for sample 10 : ung2

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	346	570.04	2,495.3		72.81
3	368	81.50	335.6		74.57
4	380	126.38	503.2		75.58
5	394	355.91	1,369.6		76.64
6	458	295.81	978.0		80.48
7	623	17.53	42.6		88.14
8	674	21.08	47.4		89.74
9	691	23.19	50.8		90.27
10	750	20.69	41.8		91.23
11	797	27.29	51.9		91.87
12	922	33.03	54.3		93.57
13	1,000	26.37	40.0		94.63
14	1,149	33.74	44.5		95.59
15	1,333	35.52	40.4		96.76
16	1,566	31.88	30.9		98.25
17	10,380	75.00	10.9	Upper Marker	113.00

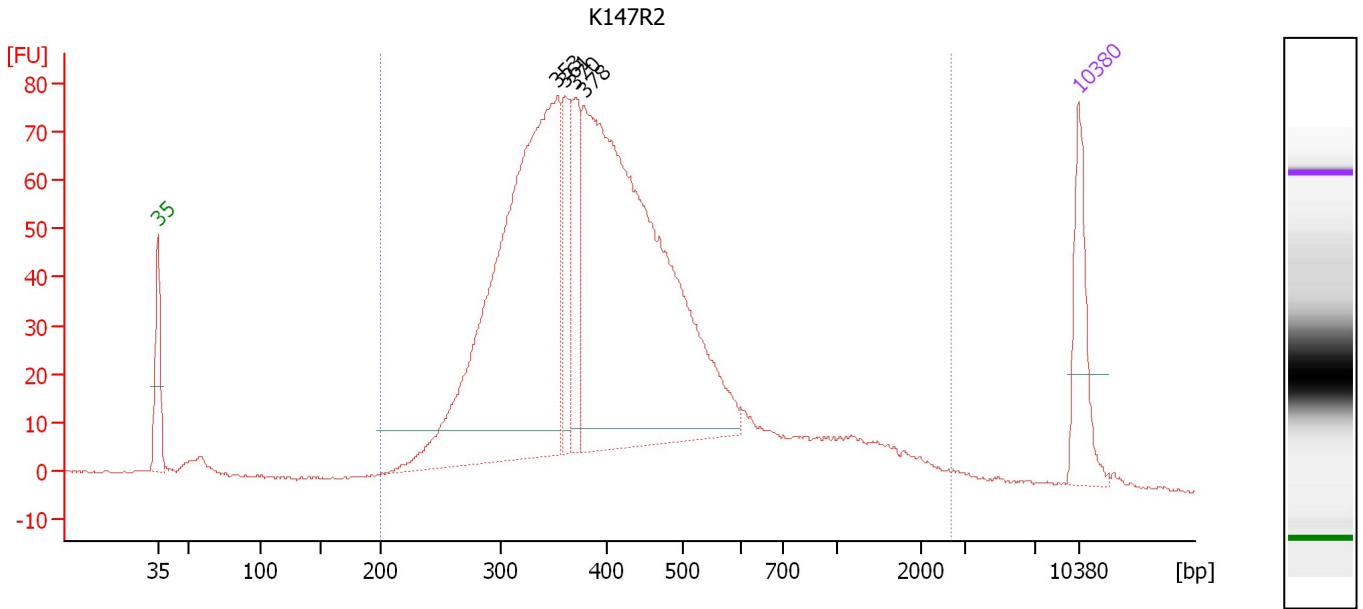
Region table for sample 10 : ung2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	5,029	618	1,422.3	7,620.9	2,117.50	97	86.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
 Modified: 6/20/2017 12:30:00 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : K147R2

Number of peaks found: 4 Corr. Area 1: 1,637.5
 Noise: 0.2

Peak table for sample 11 : K147R2

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	353	820.48	3,516.9		73.40
3	361	100.50	422.0		74.00
4	370	112.17	459.8		74.70
5	378	901.38	3,609.9		75.40
6	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : K147R2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	2,699	470	1,637.5	9,521.3	2,410.46	97	63.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2017-06-20\2017-06-20_003.xad

Created: 6/20/2017 11:48:33 AM
Modified: 6/20/2017 12:30:00 PM

Gel Image

