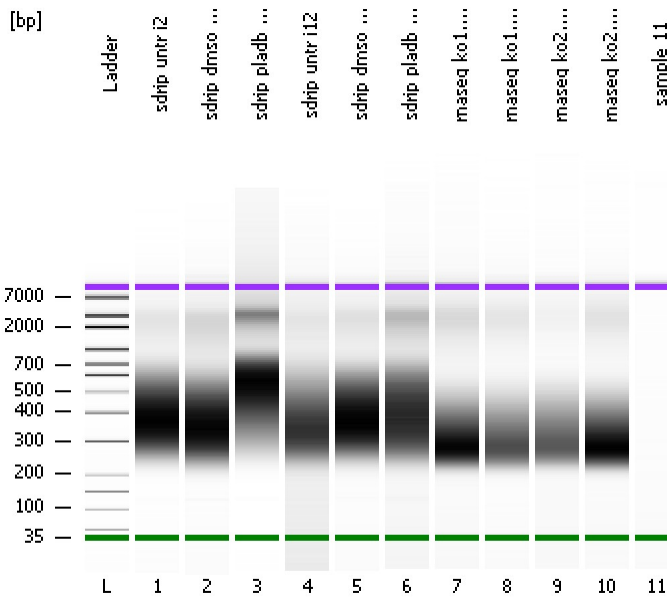


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
Modified: 12/3/2018 11:34:00 AM

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

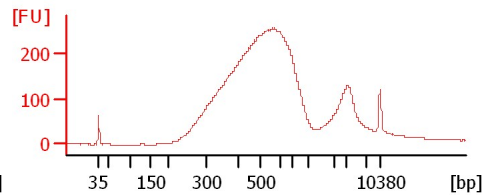
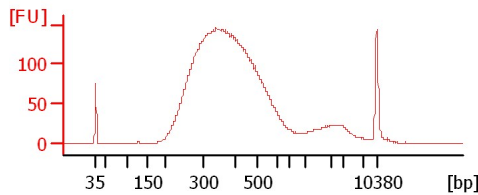
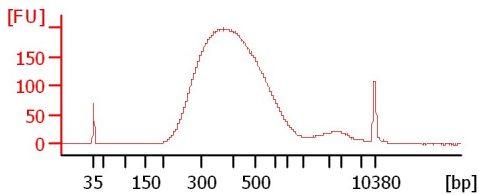
Chip Information:

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

sdrrip untr i2

sdrrip dms0 4 i4

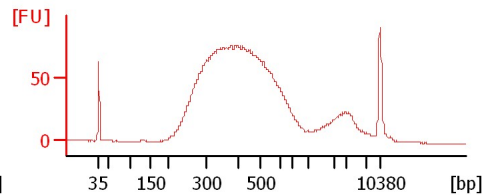
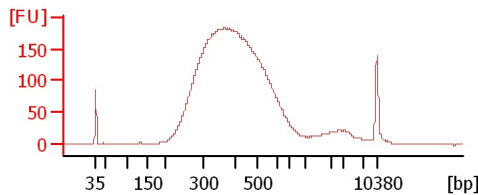
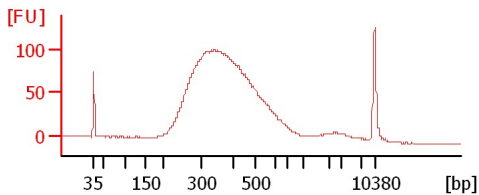
sdrrip pladb 4 i6



sdrrip untr i12

sdrrip dms0 4 i14

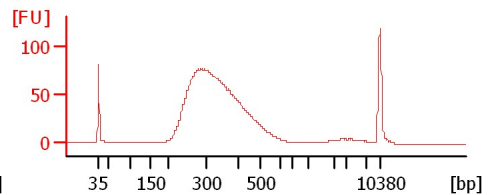
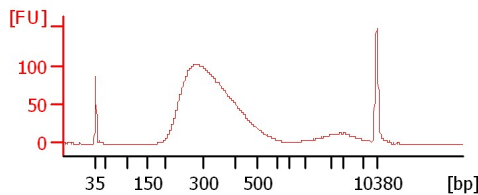
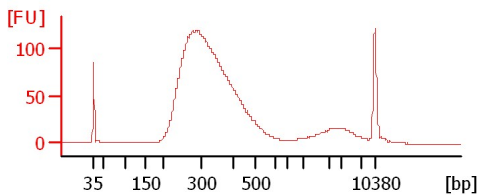
sdrrip pladb 4 i16



rnaseq ko1.1 i15

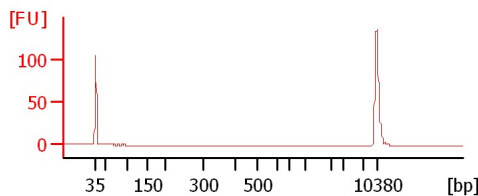
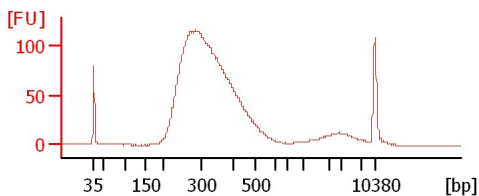
rnaseq ko1.2 i16

rnaseq ko2.1 i18



rnaseq ko2.2 i19

sample 11



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
Modified: 12/3/2018 11:34:00 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
sdrip untr i2		<input type="checkbox"/>	✓			
sdrip dms0 4 i4		<input type="checkbox"/>	✓			
sdrip pladb 4 i6		<input type="checkbox"/>	✓			
sdrip untr i12		<input type="checkbox"/>	✓			
sdrip dms0 4 i14		<input type="checkbox"/>	✓			
sdrip pladb 4 i16		<input type="checkbox"/>	✓			
rnaseq ko1.1 i15		<input type="checkbox"/>	✓			
rnaseq ko1.2 i16		<input type="checkbox"/>	✓			
rnaseq ko2.1 i18		<input type="checkbox"/>	✓			
rnaseq ko2.2 i19		<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\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
Modified: 12/3/2018 11:34:00 AM

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

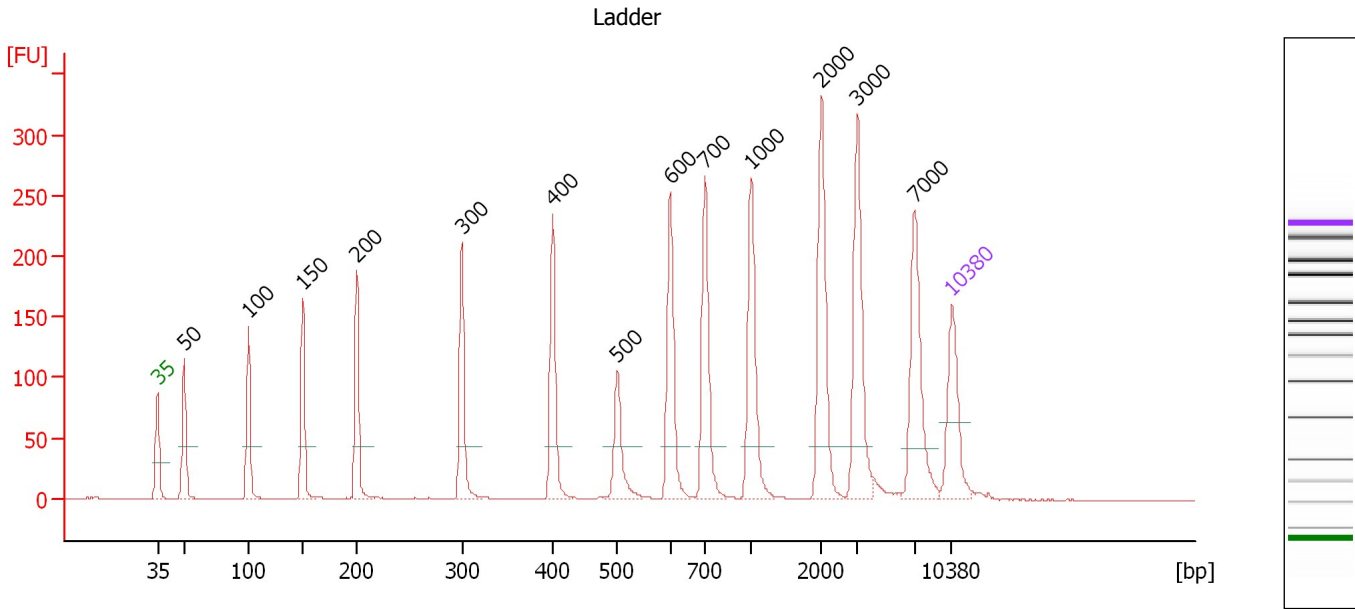
Ladder

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\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

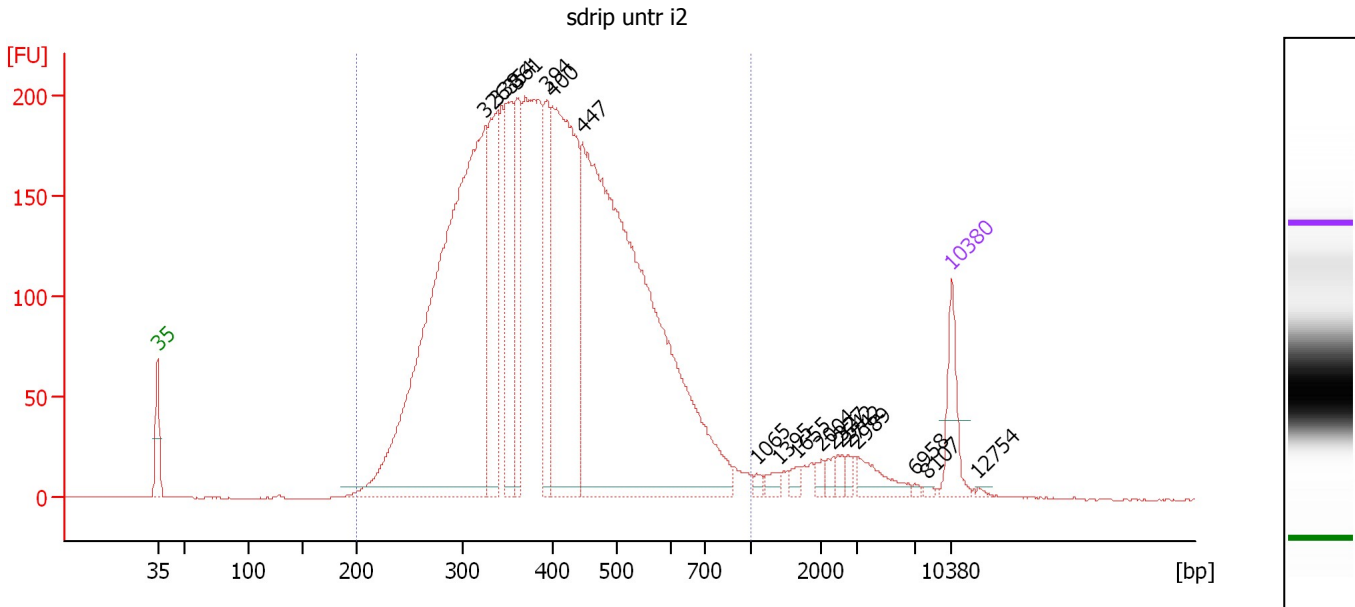
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	51.02
4	150	150.00	1,515.2	Ladder Peak	55.83
5	200	150.00	1,136.4	Ladder Peak	60.54
6	300	150.00	757.6	Ladder Peak	69.81
7	400	150.00	568.2	Ladder Peak	77.83
8	500	150.00	454.5	Ladder Peak	83.50
9	600	150.00	378.8	Ladder Peak	88.16
10	700	150.00	324.7	Ladder Peak	91.24
11	1,000	150.00	227.3	Ladder Peak	95.32
12	2,000	150.00	113.6	Ladder Peak	101.52
13	3,000	150.00	75.8	Ladder Peak	104.69
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\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : sdrip untr i2

Number of peaks found: 18 Corr. Area 1: 5,154.7
 Noise: 0.2

Peak table for sample 1 : sdrip untr 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	326	1,738.66	8,079.6		71.90
3	338	317.36	1,421.7		72.87
4	354	270.30	1,156.8		74.14
5	361	220.60	926.6		74.68
6	394	217.84	838.6		77.32
7	400	707.76	2,678.4		77.85
8	447	1,800.13	6,103.4		80.49
9	1,065	9.34	13.3		95.72
10	1,395	15.80	17.2		97.77
11	1,655	14.06	12.9		99.38
12	2,004	14.07	10.6		101.53
13	2,327	13.27	8.6		102.55
14	2,542	14.95	8.9		103.24
15	2,742	10.71	5.9		103.87
16	2,989	47.22	23.9		104.65
17	6,958	4.28	0.9		109.68
18	8,107	4.14	0.8		110.80
19	10,380	75.00	10.9	Upper Marker	113.00
20	12,754	0.00	0.0		115.29

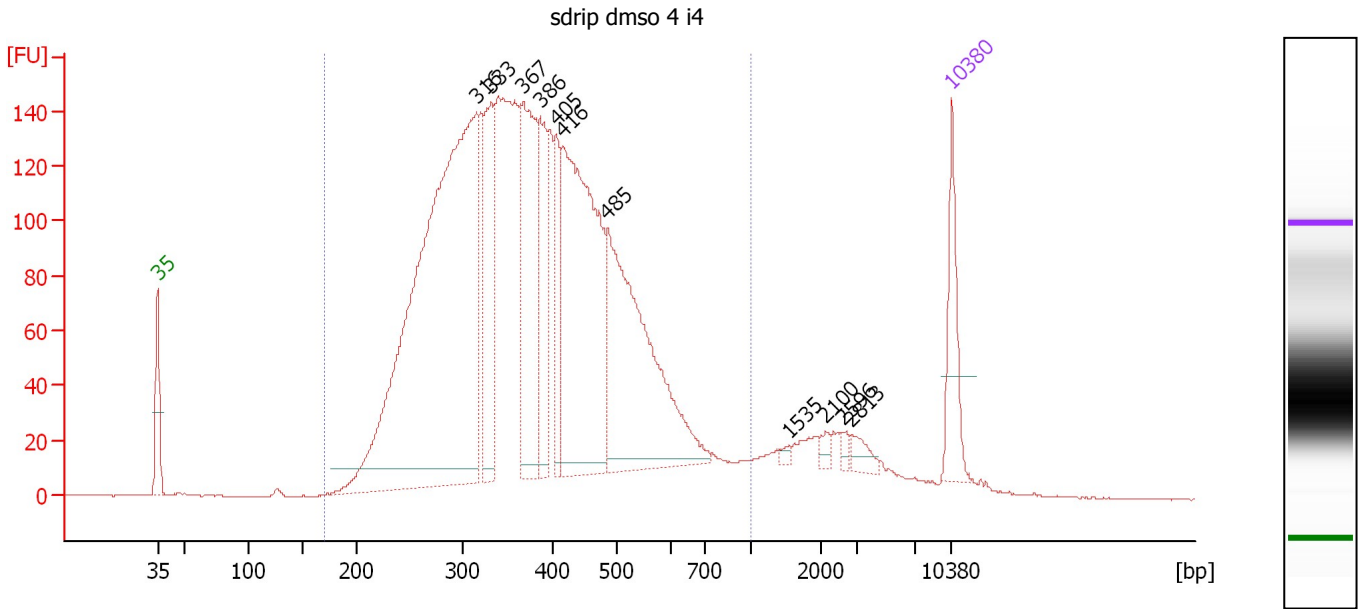
Region table for sample 1 : sdrip untr i2

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	412	6,094.11	5,154.7	24,869.8	95	28.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : sdrip dms0 4 i4

Number of peaks found: 11 Corr. Area 1: 3,891.1
 Noise: 0.3

Peak table for sample 2 : sdrip dms0 4 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	316	1,302.73	6,247.2		71.09
3	333	196.07	893.5		72.42
4	367	289.27	1,192.8		75.22
5	386	155.09	608.0		76.75
6	405	102.56	383.6		78.12
7	416	539.53	1,967.2		78.71
8	485	457.26	1,428.6		82.65
9	1,535	5.37	5.3		98.64
10	2,100	9.88	7.1		101.83
11	2,596	8.33	4.9		103.41
12	2,813	18.02	9.7		104.10
13	10,380	75.00	10.9	Upper Marker	113.00

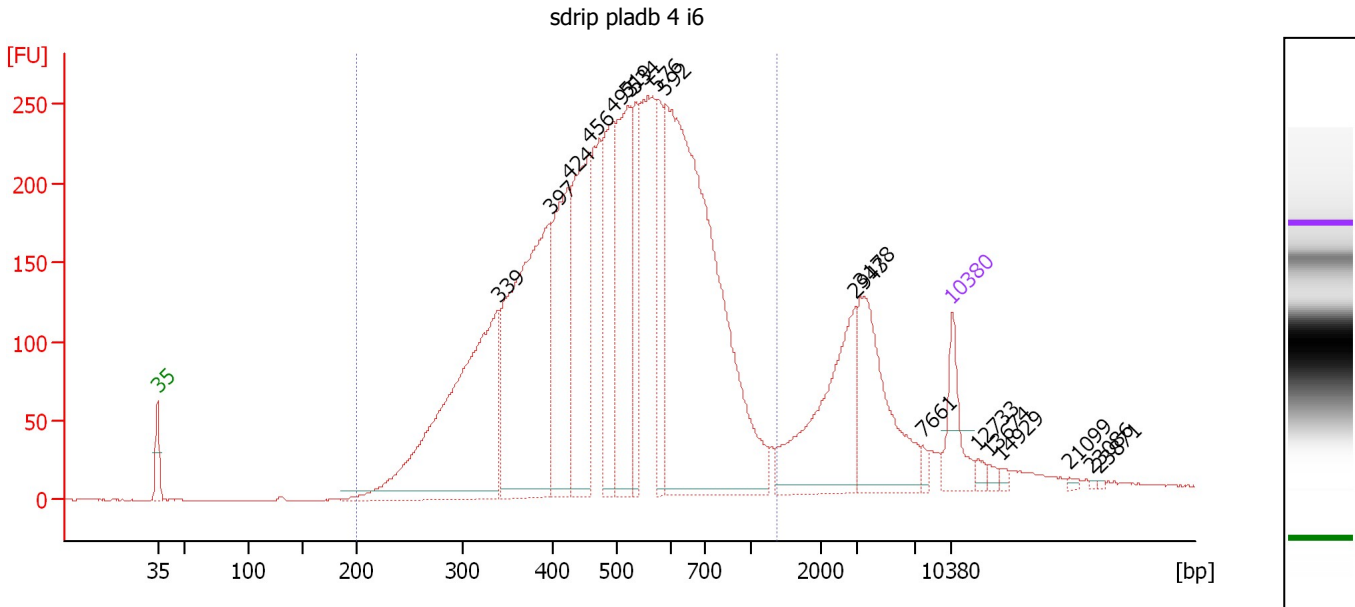
Region table for sample 2 : sdrip dms0 4 i4

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
169	1,000	391	4,144.55	3,891.1	18,014.0	93	30.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : sdrip pladb 4 i6

Number of peaks found: 18 Corr. Area 1: 5,936.8
 Noise: 0.3

Peak table for sample 3 : sdrip pladb 4 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	339	789.29	3,523.4		72.97
3	397	745.67	2,843.2		77.62
4	424	336.80	1,203.8		79.19
5	456	387.24	1,286.6		81.01
6	493	253.55	778.5		83.13
7	519	364.58	1,064.0		84.39
8	534	157.94	447.9		85.10
9	576	160.95	423.7		87.02
10	592	1,169.20	2,993.4		87.78
11	2,943	264.25	136.0		104.51
12	3,178	226.79	108.1		104.91
13	7,661	10.66	2.1		110.37
14	10,380	75.00	10.9	Upper Marker	113.00
15	12,733	0.00	0.0		115.27
16	13,674	0.00	0.0		116.18
17	14,929	0.00	0.0		117.40
18	21,099	0.00	0.0		123.36
19	23,086	0.00	0.0		125.28
20	23,871	0.00	0.0		126.04

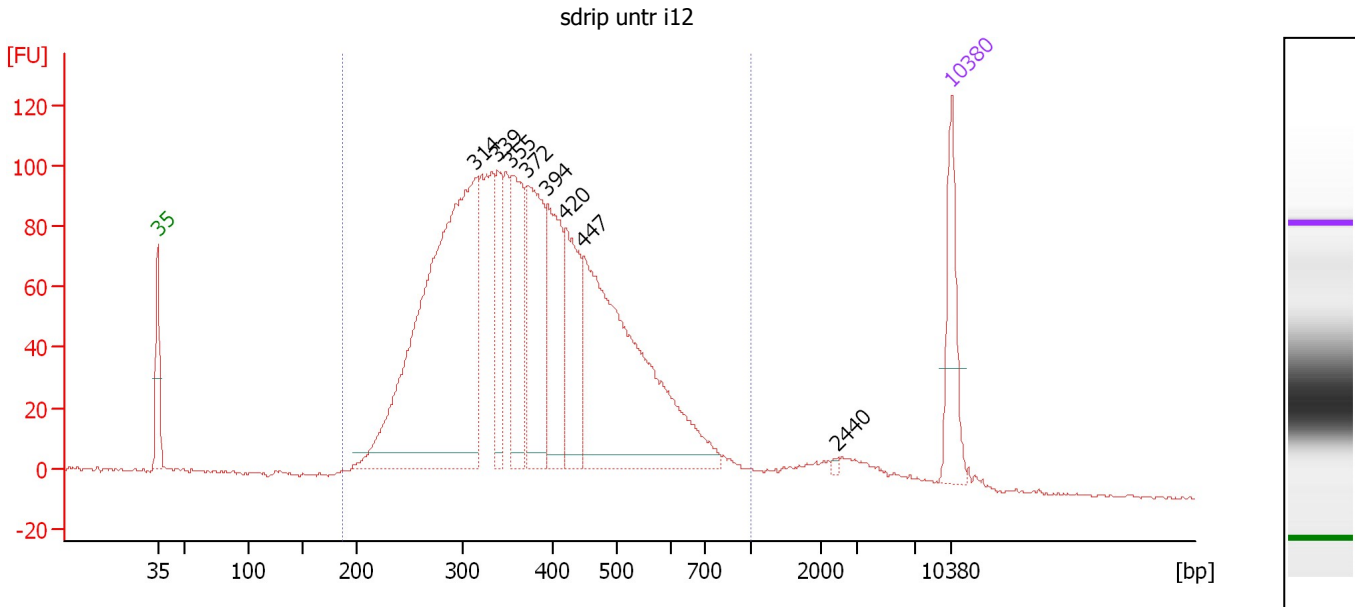
Region table for sample 3 : sdrip pladb 4 i6

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,354	517	4,999.20	5,936.8	16,837.4	86	32.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : sdrip untr i12

Number of peaks found: 8 Corr. Area 1: 2,581.1
 Noise: 0.5

Peak table for sample 4 : sdrip untr 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	314	824.88	3,976.0		70.96
3	339	102.58	459.0		72.90
4	355	165.21	706.0		74.19
5	372	214.43	873.9		75.57
6	394	159.58	613.5		77.36
7	420	149.05	538.1		78.95
8	447	520.90	1,766.5		80.48
9	2,440	2.42	1.5		102.91
10	10,380	75.00	10.9	Upper Marker	113.00

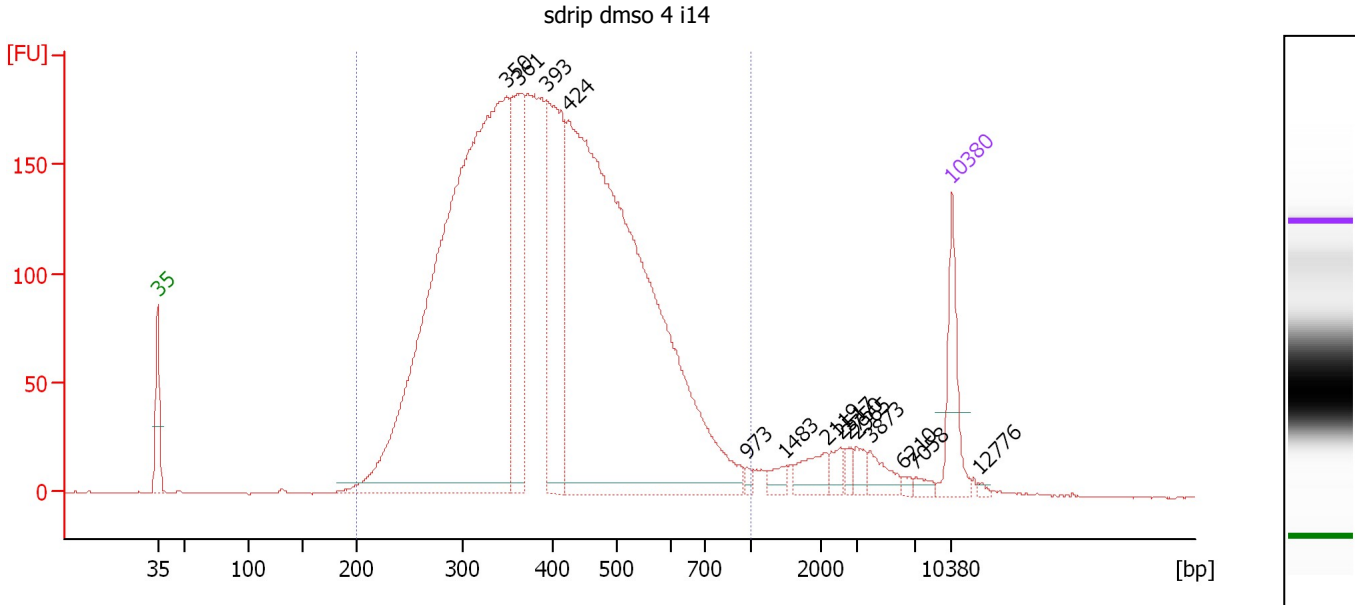
Region table for sample 4 : sdrip untr i12

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
186	1,000	392	2,670.36	2,581.1	11,509.8	96	30.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : sdrip dms0 4 i14

Number of peaks found: 14 Corr. Area 1: 4,740.9
 Noise: 0.2

Peak table for sample 5 : sdrip dms0 4 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	350	1,728.31	7,490.0		73.79
3	361	310.36	1,301.1		74.74
4	393	369.26	1,423.9		77.26
5	424	1,646.70	5,880.0		79.21
6	973	7.34	11.4		94.95
7	1,483	16.72	17.1		98.32
8	2,119	34.38	24.6		101.89
9	2,517	18.56	11.2		103.16
10	2,750	9.78	5.4		103.89
11	2,965	16.75	8.6		104.58
12	3,873	27.45	10.7		105.79
13	6,210	5.19	1.3		108.74
14	7,058	9.30	2.0		109.79
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,776	0.00	0.0		115.32

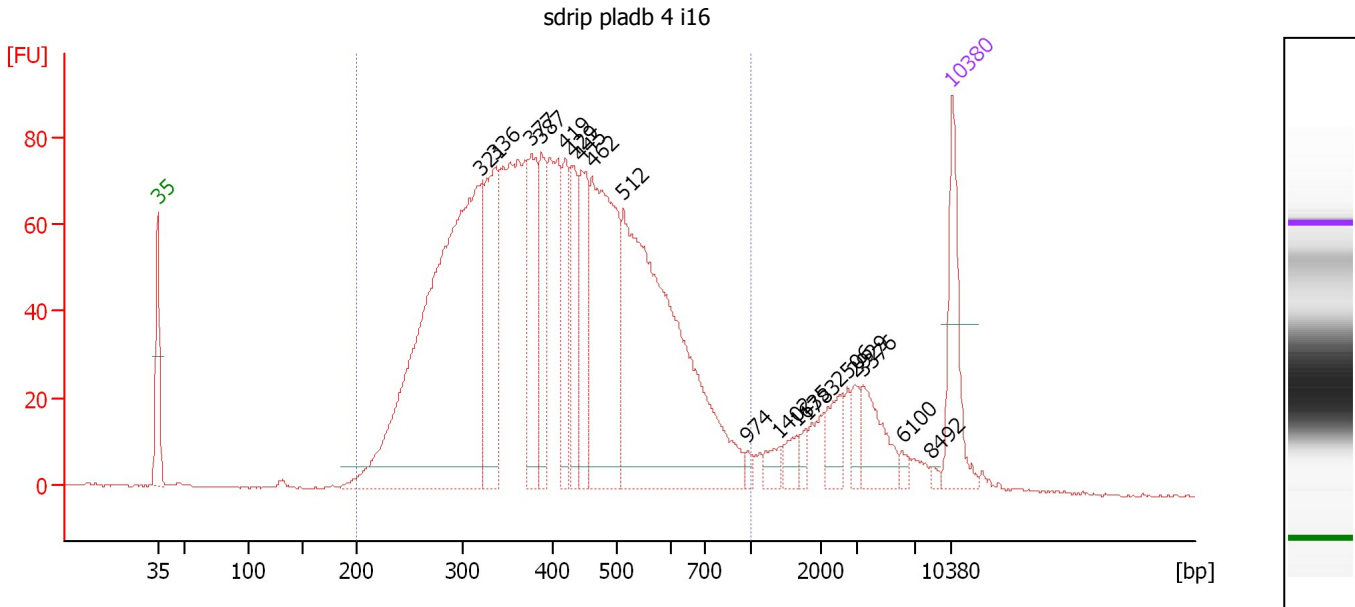
Region table for sample 5 : sdrip dms0 4 i14

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	411	4,554.45	4,740.9	18,645.4	95	29.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : sdrip pladb 4 i16

Number of peaks found: 18 Corr. Area 1: 2,198.1
 Noise: 0.2

Peak table for sample 6 : sdrip pladb 4 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	321	796.20	3,756.5		71.50
3	336	190.51	859.4		72.69
4	377	126.56	509.1		75.96
5	387	96.06	375.7		76.82
6	419	84.19	304.4		78.91
7	429	81.97	289.2		79.50
8	445	110.52	376.6		80.36
9	462	282.41	926.8		81.33
10	512	564.85	1,671.2		84.07
11	974	6.52	10.1		94.96
12	1,402	15.39	16.6		97.81
13	1,635	16.17	15.0		99.26
14	1,783	9.62	8.2		100.17
15	2,506	31.44	19.0		103.12
16	2,929	17.12	8.9		104.46
17	3,376	48.91	22.0		105.16
18	6,100	6.81	1.7		108.60
19	8,492	4.07	0.7		111.17
20	10,380	75.00	10.9	Upper Marker	113.00

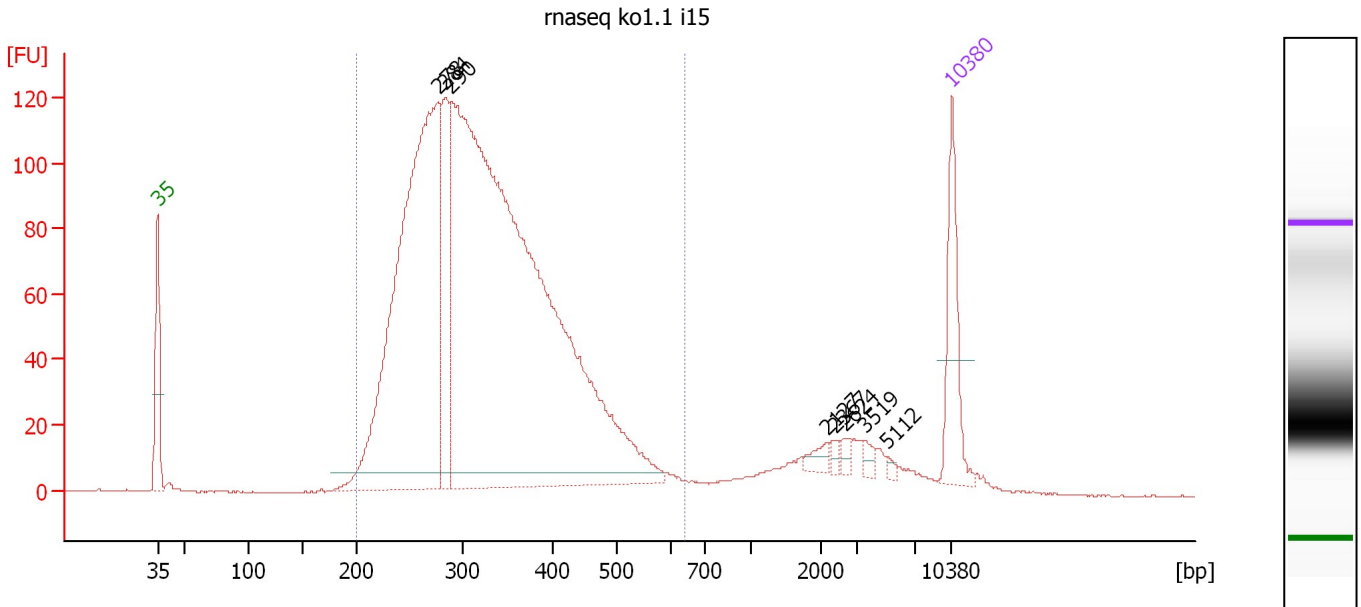
Region table for sample 6 : sdrip pladb 4 i16

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	424	2,907.28	2,198.1	11,784.5	89	31.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : rnaseq ko1.1 i15

Number of peaks found: 8 Corr. Area 1: 2,395.5
 Noise: 0.2

Peak table for sample 7 : rnaseq ko1.1 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	278	875.29	4,771.4		67.76
3	284	152.52	814.2		68.31
4	290	1,745.48	9,111.9		68.90
5	2,127	11.79	8.4		101.92
6	2,367	5.24	3.4		102.68
7	2,624	6.91	4.0		103.50
8	3,519	8.21	3.5		105.34
9	5,112	3.76	1.1		107.35
10	10,380	75.00	10.9	Upper Marker	113.00

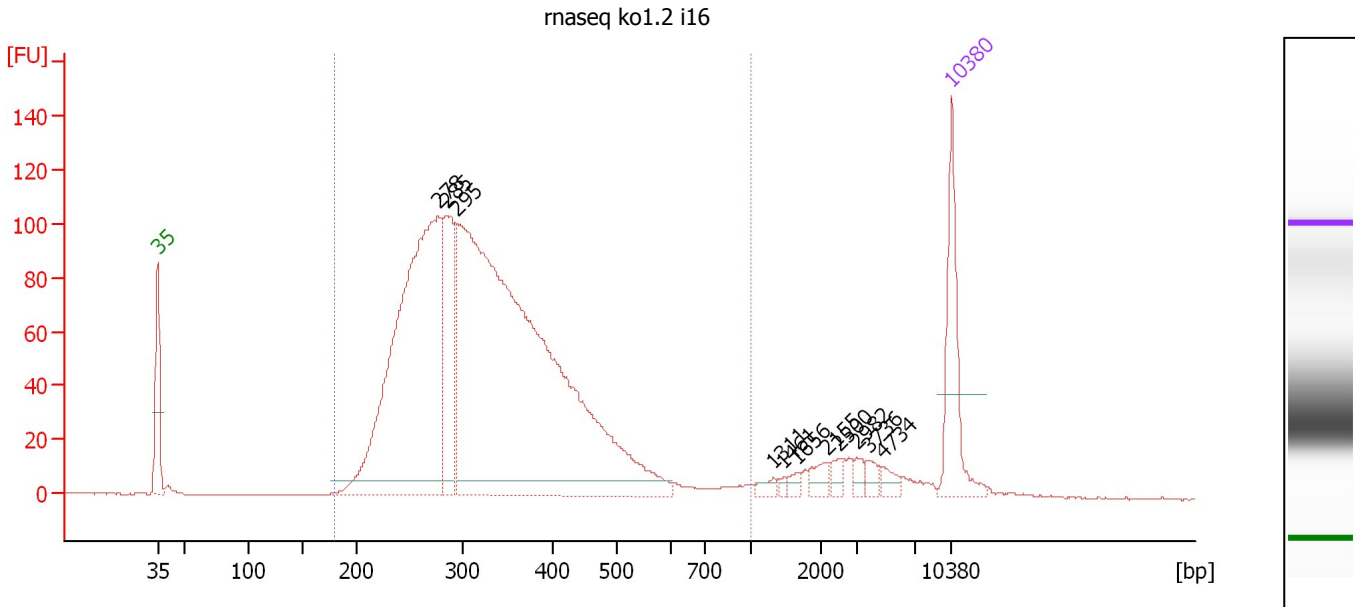
Region table for sample 7 : rnaseq ko1.1 i15

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	641	330	2,670.74	2,395.5	13,102.6	90	23.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : rnaseq ko1.2 i16

Number of peaks found: 11 Corr. Area 1: 2,137.9
 Noise: 0.2

Peak table for sample 8 : rnaseq ko1.2 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	278	653.79	3,562.6		67.77
3	285	143.69	763.5		68.43
4	295	1,192.79	6,123.1		69.36
5	1,311	6.92	8.0		97.25
6	1,461	3.35	3.5		98.18
7	1,656	5.81	5.3		99.38
8	2,155	12.19	8.6		102.01
9	2,500	8.63	5.2		103.10
10	2,982	8.20	4.2		104.63
11	3,736	9.11	3.7		105.62
12	4,734	9.70	3.1		106.88
13	10,380	75.00	10.9	Upper Marker	113.00

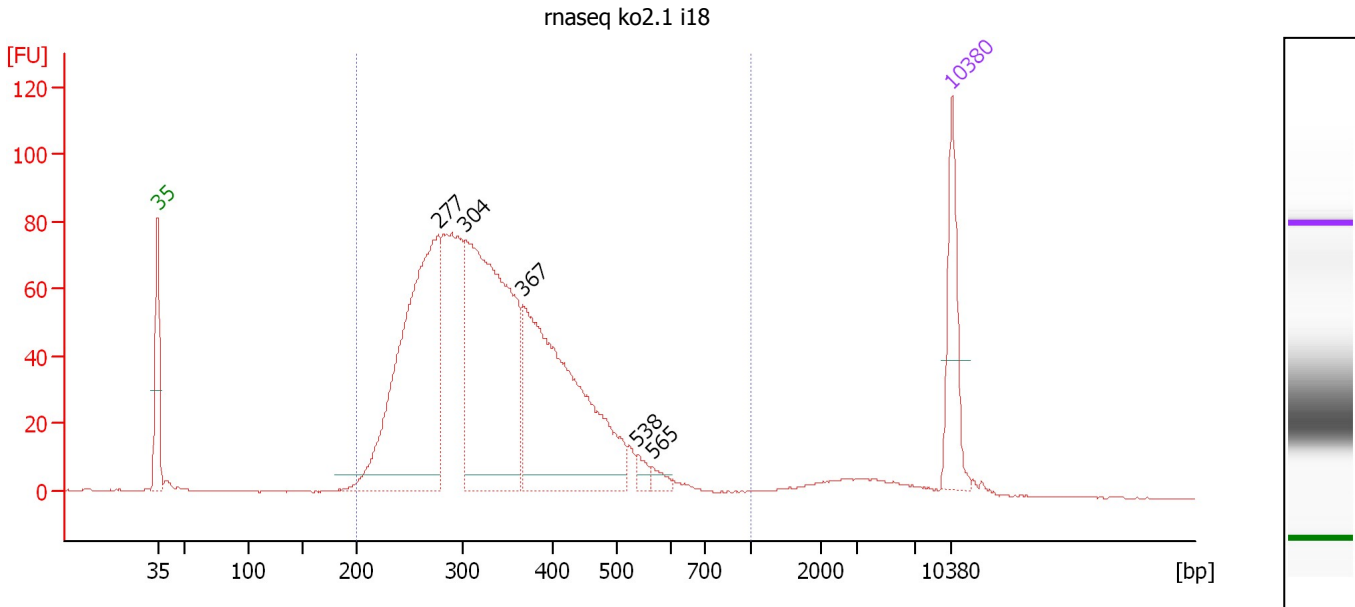
Region table for sample 8 : rnaseq ko1.2 i16

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
179	1,000	336	1,911.85	2,137.9	9,377.9	93	28.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : rnaseq ko2.1 i18

Number of peaks found: 5 Corr. Area 1: 1,608.6
 Noise: 0.2

Peak table for sample 9 : rnaseq ko2.1 i18

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	277	545.87	2,984.2		67.69
3	304	548.48	2,735.9		70.11
4	367	447.54	1,848.7		75.17
5	538	12.16	34.2		85.29
6	565	11.06	29.6		86.55
7	10,380	75.00	10.9	Upper Marker	113.00

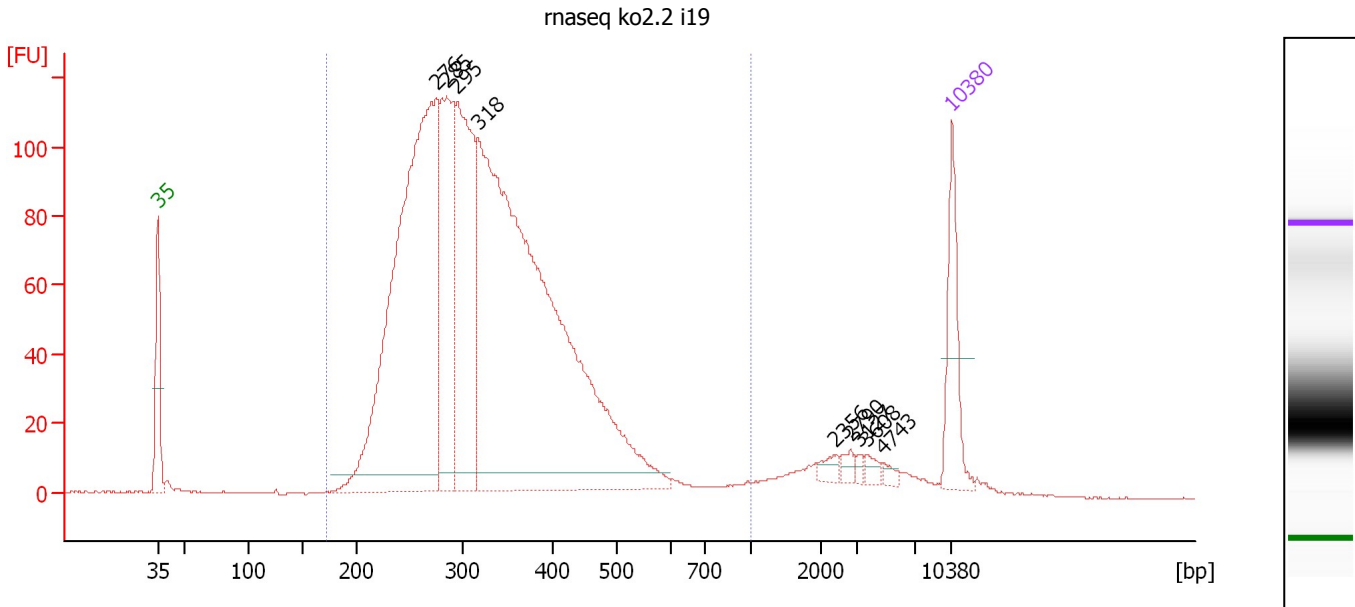
Region table for sample 9 : rnaseq ko2.1 i18

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	342	1,858.98	1,608.6	8,896.6	94	26.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : rnaseq ko2.2 i19

Number of peaks found: 9 Corr. Area 1: 2,326.8
 Noise: 0.2

Peak table for sample 10 : rnaseq ko2.2 i19

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	276	962.78	5,289.5		67.56
3	285	282.69	1,501.3		68.44
4	295	370.17	1,902.6		69.33
5	318	1,328.44	6,329.4		71.25
6	2,356	10.26	6.6		102.65
7	2,790	8.19	4.4		104.02
8	3,127	4.71	2.3		104.85
9	3,608	8.31	3.5		105.45
10	4,743	6.11	2.0		106.89
11	10,380	75.00	10.9	Upper Marker	113.00

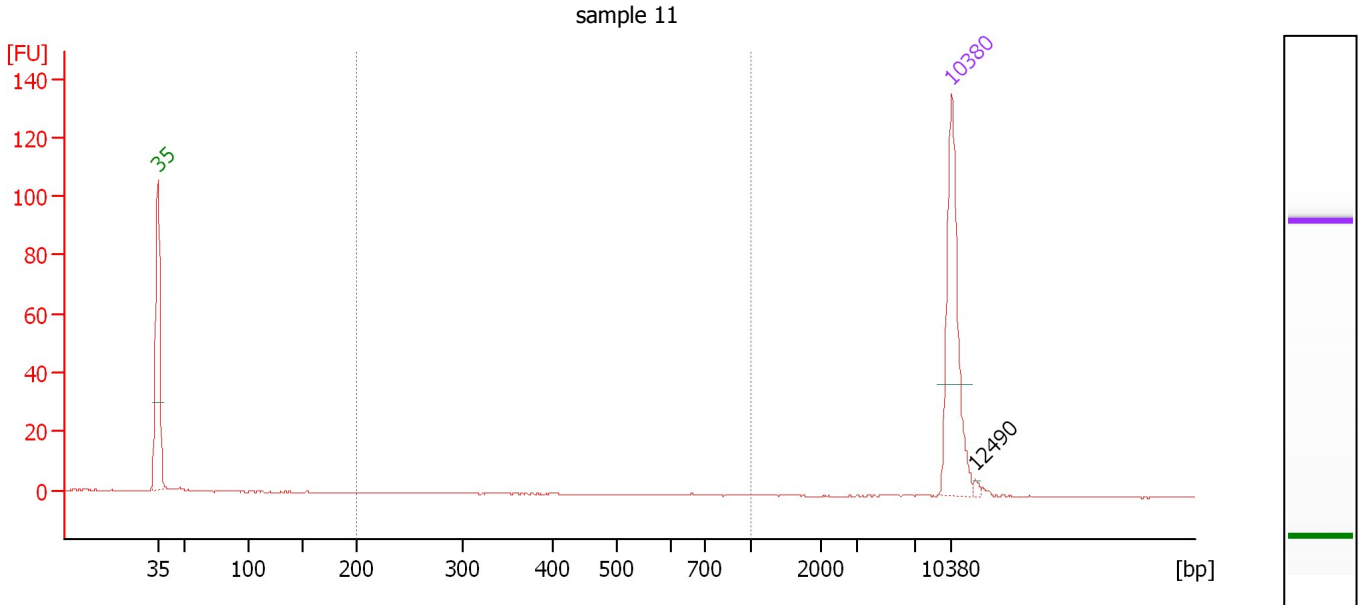
Region table for sample 10 : rnaseq ko2.2 i19

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
172	1,000	332	2,940.39	2,326.8	14,493.2	94	27.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
 Modified: 12/3/2018 11:34:00 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : sample 11

Number of peaks found: 1 Corr. Area 1: 0.1
 Noise: 0.1

Peak table for sample 11 : sample 11

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
3	12,490	0.00	0.0		115.04

Region table for sample 11 : sample 11

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	632	0.06	0.1	0.2	1	14.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-12-03\2018-12-03_001.xad

Created: 12/3/2018 10:51:44 AM
Modified: 12/3/2018 11:34:00 AM

Gel Image

