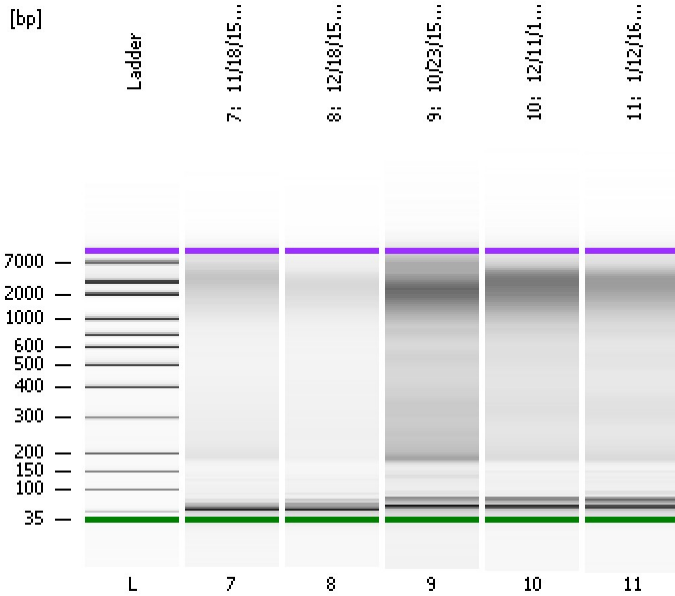


Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electrophoresis File Run Summary**



Instrument Information:

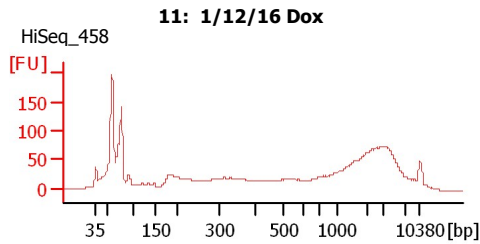
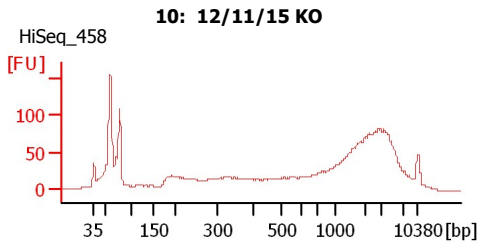
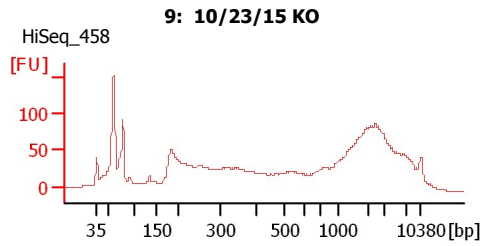
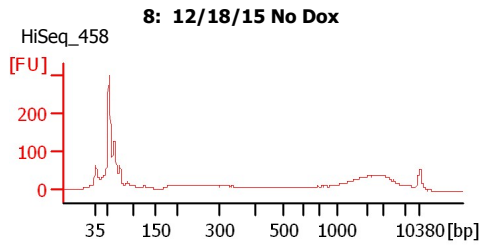
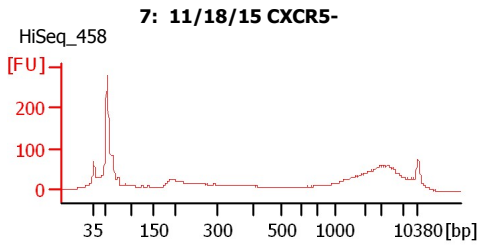
Instrument Name: DE13701086      Firmware: C.01.069  
 Serial#: DE13701086      Type: G2938B

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:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
7: 11/18/15 CXCR5-	HiSeq_458	<input type="checkbox"/>				
8: 12/18/15 No Dox	HiSeq_458	<input type="checkbox"/>				
9: 10/23/15 KO	HiSeq_458	<input type="checkbox"/>				
10: 12/11/15 KO	HiSeq_458	<input type="checkbox"/>				
11: 1/12/16 Dox	HiSeq_458	<input type="checkbox"/>				
Ladder		<input type="checkbox"/>				

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
Modified: 3/28/2016 1:02:06 PM

**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

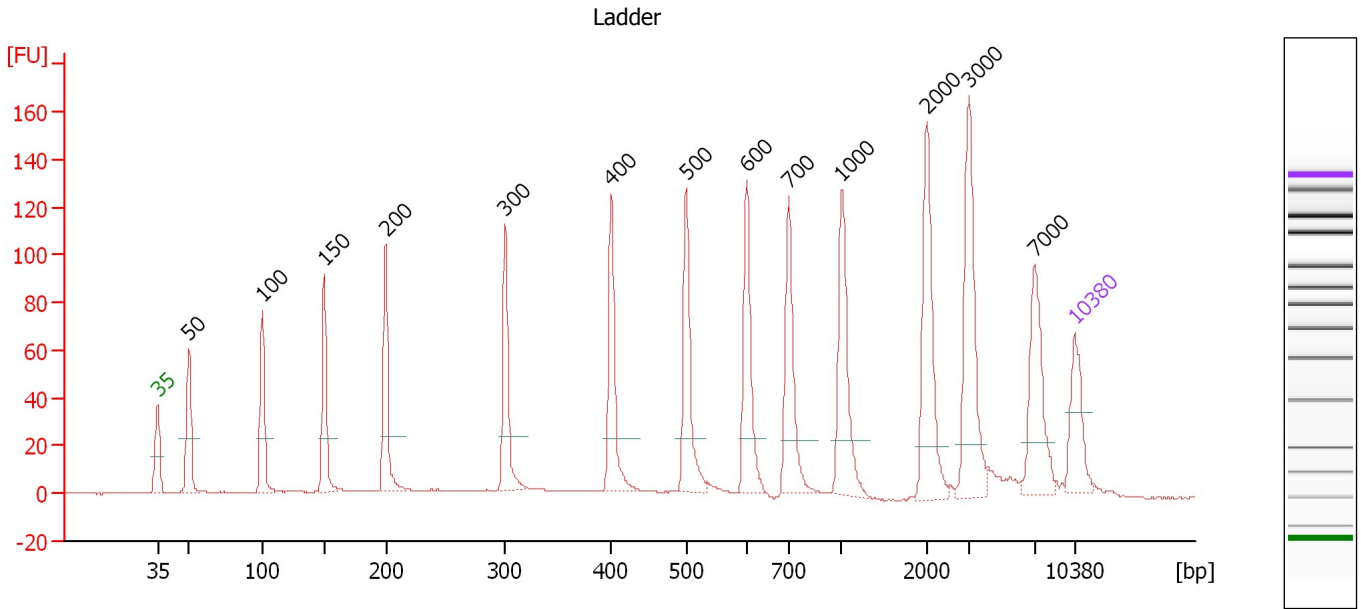
**Ladder**

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:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.3

**Peak table for Ladder**

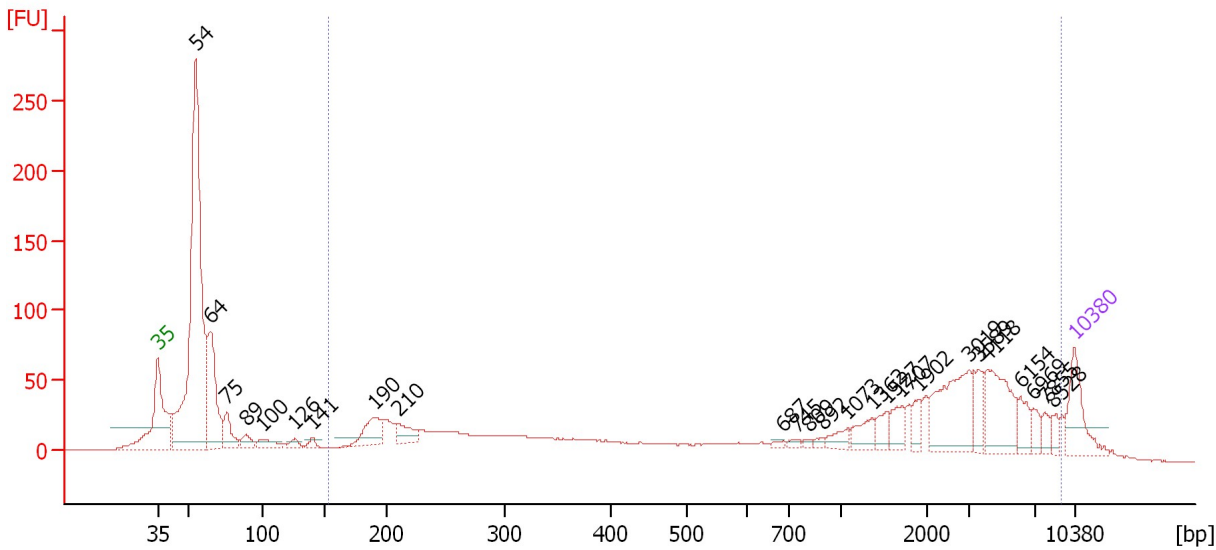
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.40
3	100	150.00	2,272.7	Ladder Peak	51.01
4	150	150.00	1,515.2	Ladder Peak	55.72
5	200	150.00	1,136.4	Ladder Peak	60.43
6	300	150.00	757.6	Ladder Peak	69.57
7	400	150.00	568.2	Ladder Peak	77.67
8	500	150.00	454.5	Ladder Peak	83.37
9	600	150.00	378.8	Ladder Peak	87.99
10	700	150.00	324.7	Ladder Peak	91.19
11	1,000	150.00	227.3	Ladder Peak	95.24
12	2,000	150.00	113.6	Ladder Peak	101.74
13	3,000	150.00	75.8	Ladder Peak	104.94
14	7,000	150.00	32.5	Ladder Peak	109.94
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

7: 11/18/15 CXCR5- [ HiSeq\_458 ]



**Overall Results for sample 7 : 7: 11/18/15 CXCR5-**

Number of peaks found: 25                      Corr. Area 1: 1,342.8  
 Noise: 0.2

**Peak table for sample 7 : 7: 11/18/15 CXCR5-**

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	54	1,044.43	29,080.5		45.90
3	64	242.33	5,702.1		47.02
4	75	68.32	1,375.1		48.24
5	89	30.16	514.2		49.76
6	100	33.94	515.5		50.98
7	126	16.79	201.6		53.47
8	141	13.93	150.0		54.84
9	190	83.81	667.0		59.52
10	210	46.81	337.6		61.35
11	687	5.87	12.9		90.79
12	745	7.12	14.5		91.80
13	809	5.86	11.0		92.67
14	892	7.65	13.0		93.78
15	1,073	22.75	32.1		95.72
16	1,362	34.64	38.5		97.60
17	1,527	27.46	27.2		98.66
18	1,707	34.65	30.8		99.83
19	1,902	24.71	19.7		101.10
20	3,019	149.71	75.1		104.97
21	3,589	36.32	15.3		105.68
22	4,118	111.16	40.9		106.34
23	6,154	35.69	8.8		108.88
24	6,969	18.79	4.1		109.90
25	7,855	16.92	3.3		110.71

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 7 : 7: 11/18/15 CXCR5-

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	8,528	16.28	2.9		111.32
27	10,380	75.00	10.9	Upper Marker	113.00

#### Region table for sample 7 : 7: 11/18/15 CXCR5-

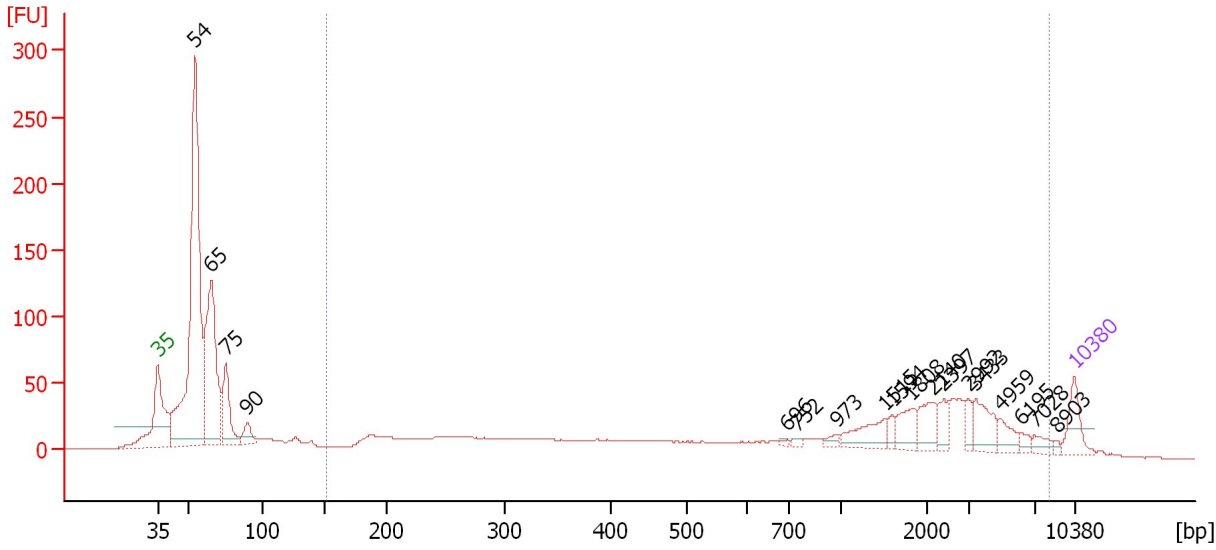
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% of Total	Size distribution in CV [%]
153	9,335	2,313	1,342.8	5,206.7	1,571.09	60	98.5

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

8: 12/18/15 No Dox [ HiSeq\_458 ]



**Overall Results for sample 8 : 8: 12/18/15 No Dox**

Number of peaks found: 18                      Corr. Area 1: 994.8  
 Noise: 0.3

**Peak table for sample 8 : 8: 12/18/15 No Dox**

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	54	1,608.45	44,896.9		45.88
3	65	682.44	15,947.0		47.07
4	75	227.75	4,604.8		48.20
5	90	65.22	1,102.6		49.85
6	696	5.77	12.5		91.07
7	752	8.86	17.8		91.90
8	973	17.10	26.6		94.88
9	1,515	91.46	91.5		98.59
10	1,594	26.04	24.8		99.10
11	1,808	69.88	58.6		100.49
12	2,140	77.08	54.6		102.19
13	2,397	47.16	29.8		103.01
14	2,992	36.85	18.7		104.92
15	3,433	88.55	39.1		105.49
16	4,959	43.50	13.3		107.39
17	6,195	18.95	4.6		108.93
18	7,028	26.10	5.6		109.96
19	8,903	8.42	1.4		111.66
20	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 8 : 8: 12/18/15 No Dox**

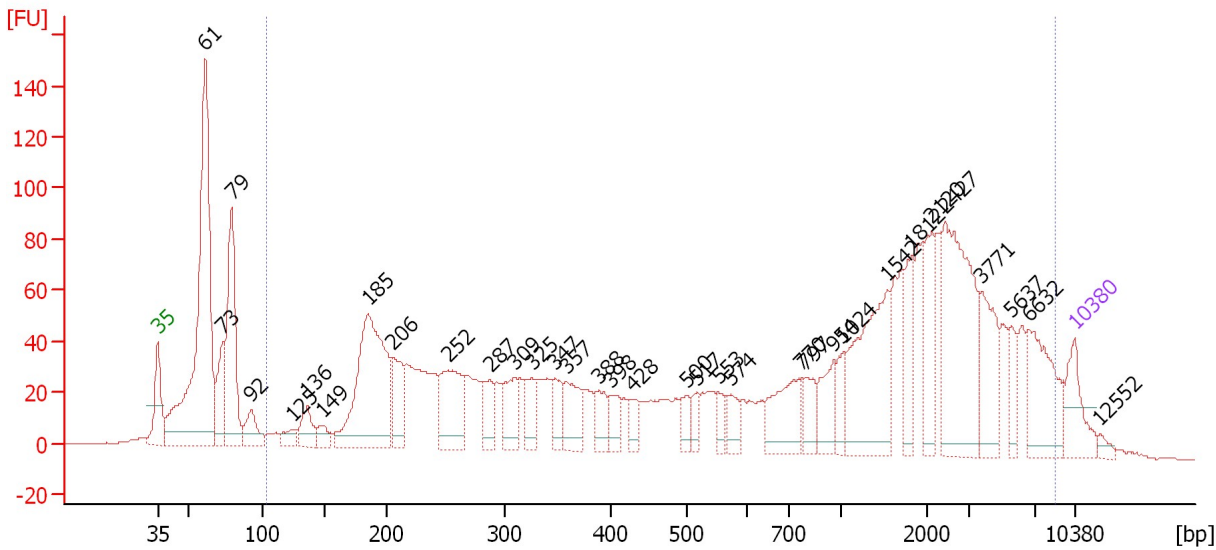
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
153	8,314	1,780	994.8	6,327.3	1,931.78	49	99.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

9: 10/23/15 KO [ HiSeq\_458 ]



**Overall Results for sample 9 : 9: 10/23/15 KO**

Number of peaks found: 34                      Corr. Area 1: 2,379.3  
 Noise: 0.3

**Peak table for sample 9 : 9: 10/23/15 KO**

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	61	965.23	24,015.0		46.62
3	73	133.98	2,767.0		48.02
4	79	346.33	6,649.9		48.64
5	92	78.58	1,290.0		50.14
6	125	38.07	461.8		53.36
7	136	70.45	782.2		54.44
8	149	36.32	369.1		55.63
9	185	530.86	4,339.3		59.05
10	206	119.06	876.3		60.97
11	252	195.92	1,179.1		65.16
12	287	76.26	402.7		68.37
13	309	101.89	498.8		70.34
14	325	64.74	302.0		71.58
15	347	64.54	282.2		73.34
16	357	96.25	408.0		74.22
17	388	54.60	213.2		76.71
18	398	50.76	193.1		77.53
19	428	31.82	112.8		79.24
20	500	34.59	104.8		83.38
21	517	33.01	96.7		84.16
22	553	31.95	87.5		85.82
23	574	40.45	106.7		86.80
24	770	133.94	263.6		92.13
25	797	58.07	110.4		92.50



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 9 : 9: 10/23/15 KO**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	954	74.41	118.2		94.62
27	1,024	48.34	71.5		95.40
28	1,542	260.87	256.4		98.76
29	1,812	76.72	64.1		100.52
30	2,120	113.31	81.0		102.13
31	2,427	316.36	197.5		103.11
32	3,771	119.16	47.9		105.91
33	5,637	46.81	12.6		108.24
34	6,632	149.56	34.2		109.48
35	10,380	75.00	10.9	Upper Marker	113.00
36	12,552	0.00	0.0		114.97

**Region table for sample 9 : 9: 10/23/15 KO**

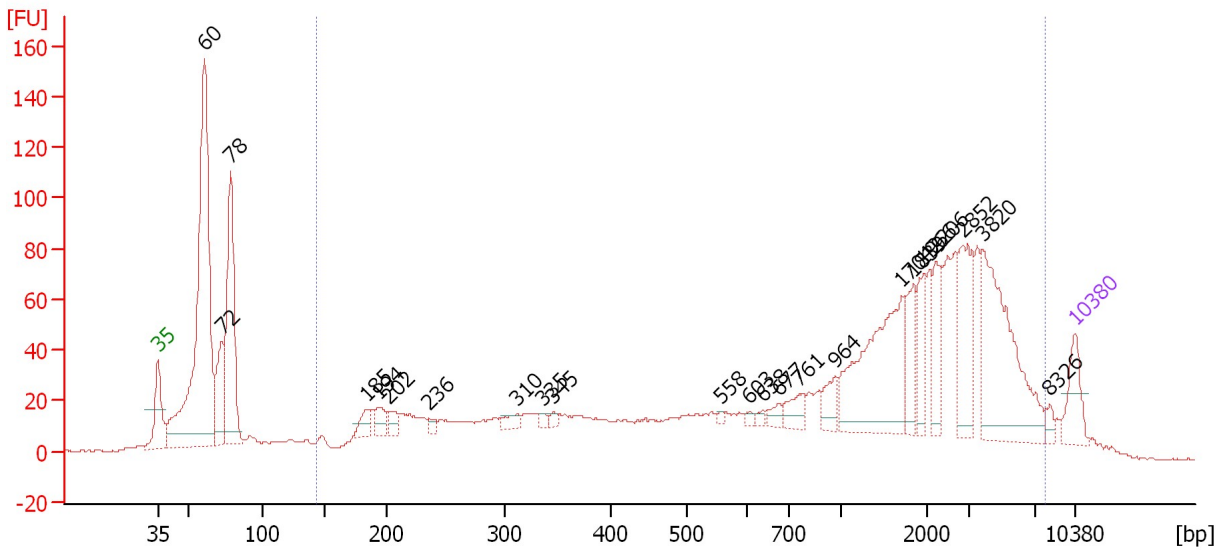
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
103	8,688	1,726	2,379.3	17,200.1	4,378.44	80	100.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

10: 12/11/15 KO [ HiSeq\_458 ]



**Overall Results for sample 10 : 10: 12/11/15 KO**

Number of peaks found: 23                      Corr. Area 1: 1,676.3  
 Noise: 0.4

**Peak table for sample 10 : 10: 12/11/15 KO**

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	60	1,292.61	32,431.3		46.57
3	72	189.04	3,957.3		47.91
4	78	523.42	10,119.0		48.58
5	185	56.15	461.0		58.97
6	194	46.38	361.4		59.91
7	202	40.74	305.3		60.63
8	236	16.84	108.0		63.73
9	310	27.63	134.9		70.40
10	335	13.19	59.6		72.42
11	345	14.94	65.5		73.24
12	558	8.44	22.9		86.06
13	603	9.44	23.7		88.08
14	638	10.52	25.0		89.22
15	677	25.52	57.1		90.46
16	761	50.41	100.4		92.01
17	964	51.37	80.8		94.75
18	1,704	364.13	323.8		99.82
19	1,839	88.41	72.8		100.70
20	1,966	82.31	63.4		101.52
21	2,206	81.79	56.2		102.40
22	2,852	151.33	80.4		104.47
23	3,820	370.18	146.8		105.97
24	8,326	16.58	3.0		111.14
25	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

... Region table for sample 10 : 10: 12/11/15 KO

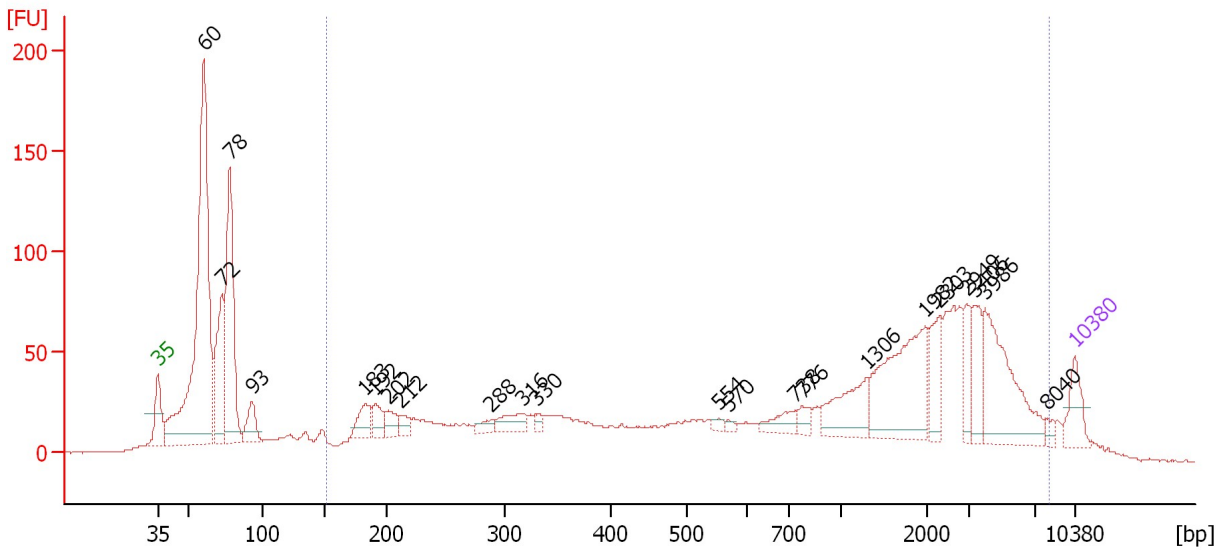
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
144	7,906	1,923	1,676.3	11,364.8	3,922.30	71	89.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

11: 1/12/16 Dox [ HiSeq\_458 ]



**Overall Results for sample 11 : 11: 1/12/16 Dox**

Number of peaks found: 22                      Corr. Area 1: 1,696.4  
 Noise: 0.6

**Peak table for sample 11 : 11: 1/12/16 Dox**

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	60	1,481.43	37,454.6		46.52
3	72	329.63	6,900.3		47.91
4	78	643.18	12,507.8		48.53
5	93	106.79	1,746.0		50.19
6	183	95.41	788.0		58.87
7	192	64.65	511.0		59.65
8	202	65.18	489.8		60.58
9	212	38.28	273.8		61.51
10	288	34.63	182.1		68.49
11	316	71.49	342.8		70.87
12	330	19.40	89.0		72.00
13	554	15.49	42.4		85.86
14	570	10.90	29.0		86.58
15	738	58.81	120.8		91.70
16	776	34.18	66.7		92.22
17	1,306	154.63	179.4		97.23
18	1,982	344.68	263.5		101.63
19	2,303	100.14	65.9		102.71
20	2,949	76.97	39.6		104.78
21	3,406	87.90	39.1		105.45
22	3,986	292.26	111.1		106.18
23	8,040	17.80	3.4		110.88
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
Modified: 3/28/2016 1:02:06 PM

**Electropherogram Summary Continued ...**

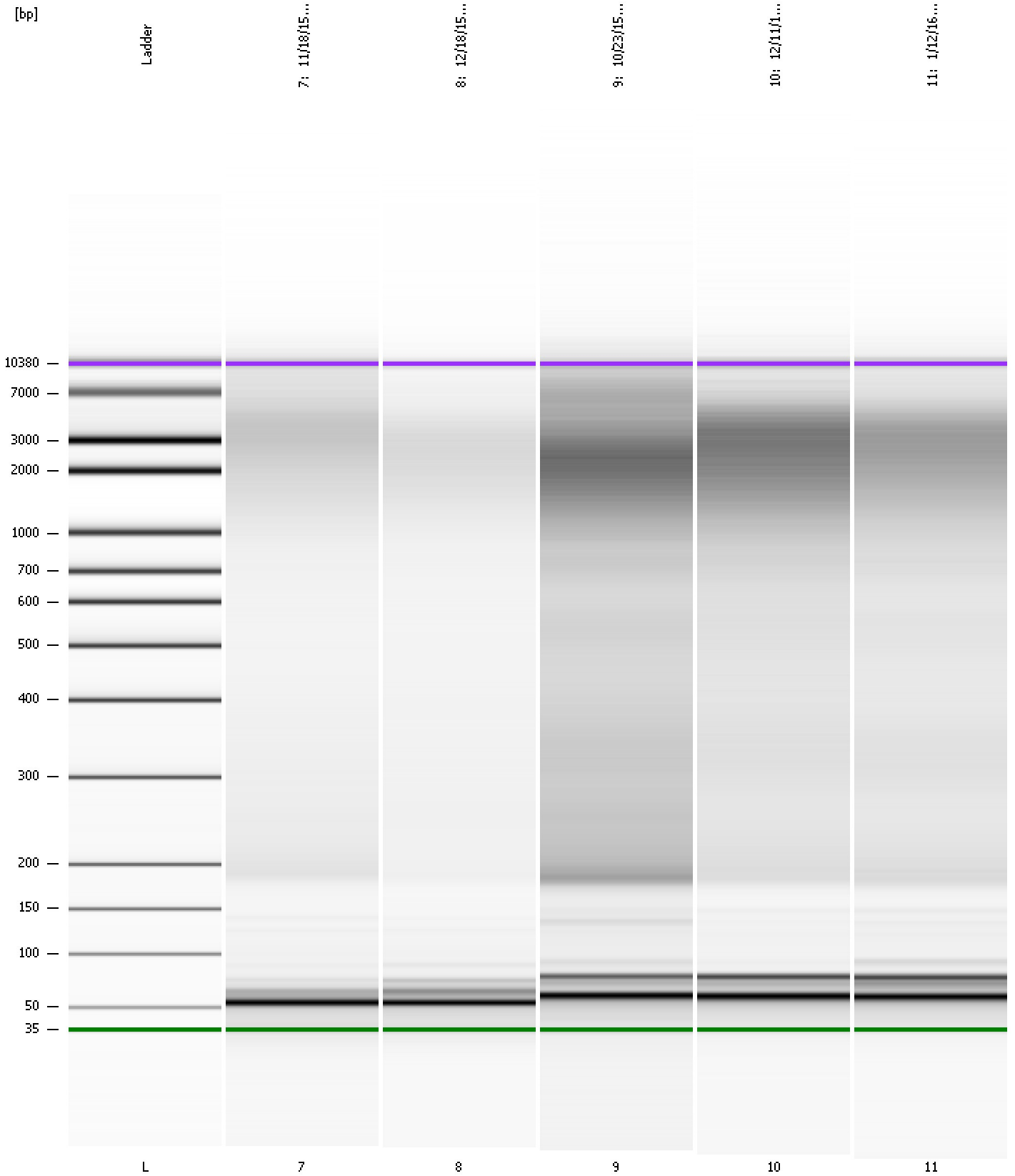
... Region table for sample 11 : 11: 1/12/16 Dox

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
152	8,305	1,818	1,696.4	12,479.0	■ 3,869.10	65	97.0

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
Modified: 3/28/2016 1:02:06 PM

**Gel Image**

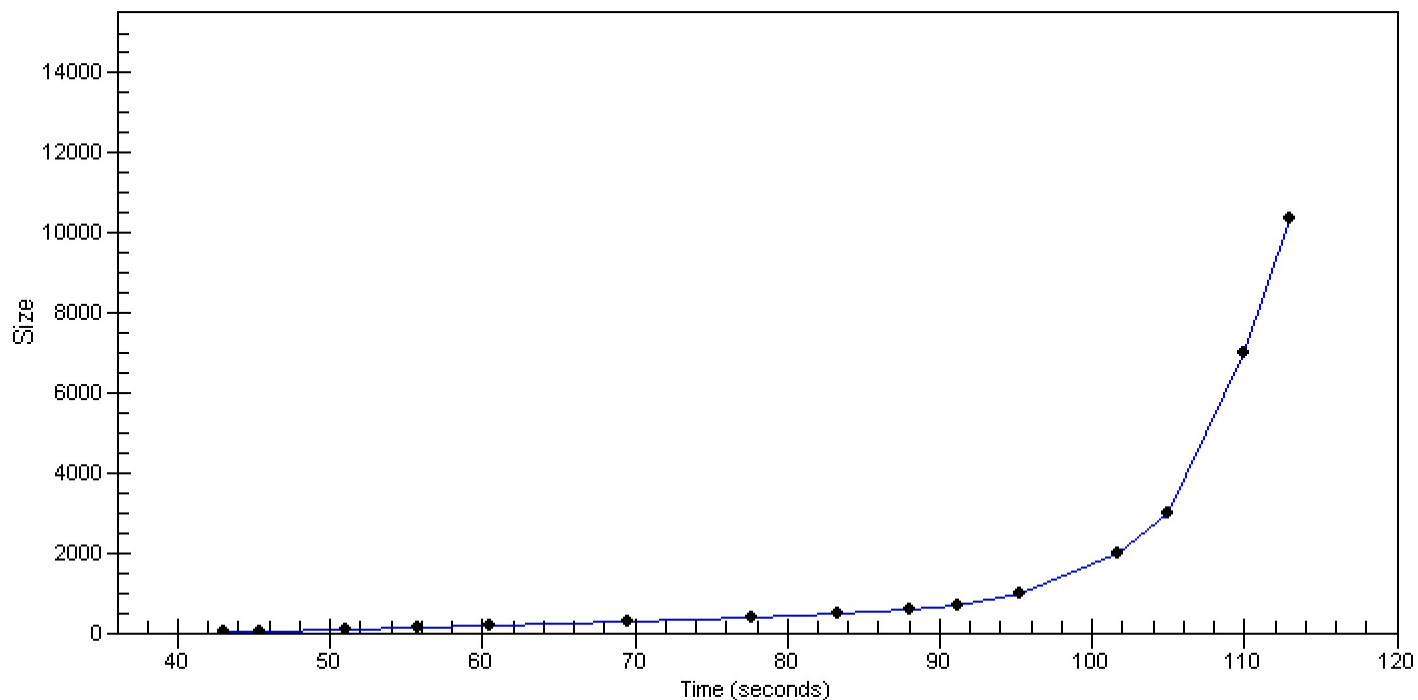


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
Modified: 3/28/2016 1:02:06 PM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...100 expert\data\2016-03-28\2016-03-28\_001\_HiSeq458\_7-11.xad

Created: 3/28/2016 12:16:50 PM  
 Modified: 3/28/2016 1:02:06 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		3/28/2016 12:58:10 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\2016-03-28\2016-03-28_001.xad)		Instrument	Run		3/28/2016 12:16:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/28/2016 12:16:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/28/2016 12:16:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/28/2016 12:16:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/28/2016 12:16:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/28/2016 12:16:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/28/2016 12:16:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1